

10/620,766

Connecting via Winsock to STN

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PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 "Ask CAS" for self-help around the clock
NEWS 3 JAN 27 Source of Registration (SR) information in REGISTRY updated
and searchable
NEWS 4 JAN 27 A new search aid, the Company Name Thesaurus, available in
CA/CAPLUS
NEWS 5 FEB 05 German (DE) application and patent publication number format
changes
NEWS 6 MAR 03 MEDLINE and LMEADLINE reloaded
NEWS 7 MAR 03 MEDLINE file segment of TOXCENTER reloaded
NEWS 8 MAR 03 FRANCEPAT now available on STN
NEWS 9 MAR 29 Pharmaceutical Substances (PS) now available on STN
NEWS 10 MAR 29 WPIFV now available on STN
NEWS 11 MAR 29 No connect hour charges in WPIFV until May 1, 2004
NEWS 12 MAR 29 New monthly current-awareness alert (SDI) frequency in RAPRA
NEWS 13 APR 26 PROMT: New display field available
NEWS 14 APR 26 IFIPAT/IFIUDB/IFICDB: New super search and display field
available
NEWS 15 APR 26 LITALERT now available on STN
NEWS 16 APR 27 NLDB: New search and display fields available

NEWS EXPRESS MARCH 31 CURRENT WINDOWS VERSION IS V7.00A, CURRENT
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 26 APRIL 2004
NEWS HOURS STN Operating Hours Plus Help Desk Availability
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NEWS WWW CAS World Wide Web Site (general information)

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 17:48:54 ON 29 APR 2004

=> FIL STNGUIDE
COST IN U.S. DOLLARS

SINCE FILE TOTAL
ENTRY SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'STNGUIDE' ENTERED AT 17:49:20 ON 29 APR 2004
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE
AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Apr 23, 2004 (20040423/UP).

=> FIL HOME

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.06

0.27

FILE 'HOME' ENTERED AT 17:49:29 ON 29 APR 2004

=> fil reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.48

FILE 'REGISTRY' ENTERED AT 17:49:32 ON 29 APR 2004

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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 27 APR 2004 HIGHEST RN 677274-15-6

DICTIONARY FILE UPDATES: 27 APR 2004 HIGHEST RN 677274-15-6

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

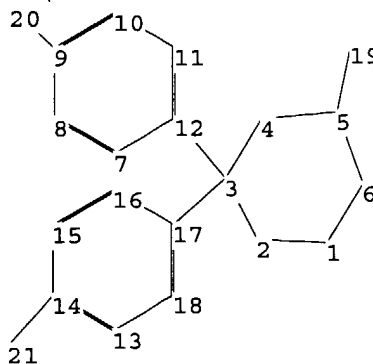
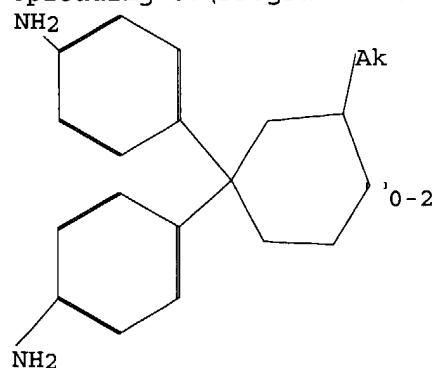
Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

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Uploading C:\Program Files\Stnexp\Queries\10620766.str



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chain nodes :
19 20 21
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
chain bonds :
3-12 3-17 5-19 9-20 14-21
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18
14-15 15-16 16-17 17-18
exact/norm bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-19 9-20 14-21
exact bonds :
3-12 3-17
normalized bonds :
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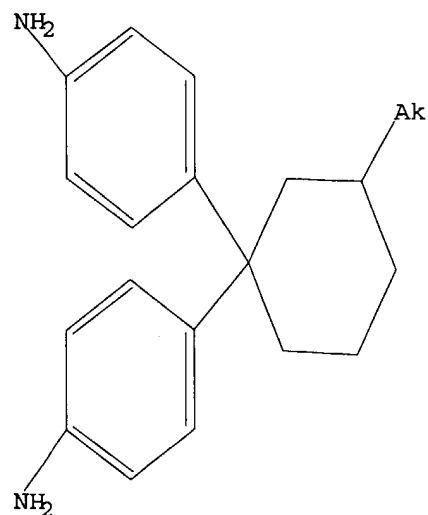
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1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS
20:CLASS 21:CLASS

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L1 STRUCTURE UPLOADED

=> d query

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 17:50:00 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 216 TO ITERATE

100.0% PROCESSED 216 ITERATIONS
SEARCH TIME: 00.00.01

2 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 3439 TO 5201
PROJECTED ANSWERS: 2 TO 124

L2 2 SEA SSS SAM L1

=> s l1 full

FULL SEARCH INITIATED 17:50:04 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 3807 TO ITERATE

100.0% PROCESSED 3807 ITERATIONS 20 ANSWERS
SEARCH TIME: 00.00.01

L3 20 SEA SSS FUL L1

=> fil caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	155.42	155.90

FILE 'CAPLUS' ENTERED AT 17:50:08 ON 29 APR 2004
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FILE COVERS 1907 - 29 Apr 2004 VOL 140 ISS 18
FILE LAST UPDATED: 28 Apr 2004 (20040428/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3

L4 7 L3

=> d l4 1-7 abs ibib hitstr

L4 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN
AB The polyamic acids and polyimides are manufactured by polymerization of
Z1

tetracarboxylic dianhydride, ≥1 aromatic diamine, ≥1 diamine
having siloxane units RSiMe₂(OSiMe₂)_nR (R = C₁-20 alkylene; n = 1-20),
and
4-R-substituted cyclohexylidene dianiline and/or 3,3,5-
trimethylcyclohexylidene dianiline (R = Me, Et, CMe₃, CMe₂CH₂CH₃,
phenyl).

Thus, a solution of a polyamic acid prepared from oxydianiline,
trimethylcyclohexylidene dianiline,
bis(3-aminopropyl)tetramethyldisiloxane
e, and 3,3',4,4'-benzophenonetetracarboxylic acid dianhydride was applied
on a glass plate, dried, and heated at 300° for 1 h to give a
polyimide film with T_g 305°, modulus of elasticity 4900 N/mm², and
tensile strength 105.8 N/mm². An adhesive tape, useful for electronic
parts, etc., containing a polyimide prepared from the polyamic acid
showed

improved adhesion at high temp and good solubility in organic solvents.

ACCESSION NUMBER: 2002:147688 CAPLUS
DOCUMENT NUMBER: 136:201334
TITLE: Manufacture of polyamic acids and polyimides with
three dimensional structure and their adhesive tapes
INVENTOR(S): Kwon, Jeong Min; Kim, Soon Sik; Chang, Kyeong Ho;
Lee,
PATENT ASSIGNEE(S): Kyung Rok
Saehan Industries Inc., S. Korea
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002060489	A2	20020226	JP 2000-239006	20000807
345976-53-6P			JP 2000-239006	20000807

PRIORITY APPLN. INFO.:
IT 345976-53-6P 345976-54-7P 345976-55-8P

345976-56-9P 401616-87-3P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or
engineered material use); PREP (Preparation); USES (Uses)
(manufacture of polyamic acids and polyimides with three dimensional
structure for adhesive tapes)

RN 345976-53-6 CAPLUS
CN 1H,3H-Benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, polymer with
4,4'-oxybis(benzenamine), 3,3'-(1,1,3,3-tetramethyl-1,3-
disiloxanedyl)bis[1-propanamine] and 4,4'-(3,3,5-
trimethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

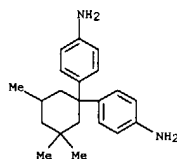
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CRN 138749-44-7
CMF C21 H28 N2

L4 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
oxybis(benzenamine), 3,3'-(1,1,3,3-tetramethyl-1,3-disiloxanedyl)bis[1-
propanamine] and 4,4'-(3,3,5-trimethylcyclohexylidene)bis(benzenamine)
(9CI) (CA INDEX NAME)

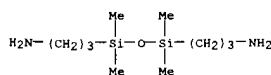
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CRN 138749-44-7
CMF C21 H28 N2



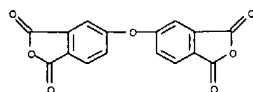
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CRN 2469-55-8
CMF C10 H28 N2 O Si2



CM 3

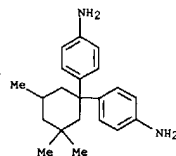
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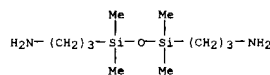
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CMF C12 H12 N2 O

L4 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



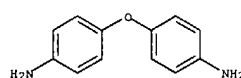
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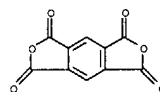
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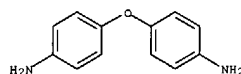
CM 4

CRN 89-32-7
CMF C10 H2 O6



RN 345976-54-7 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-oxybis-, polymer with 4,4'-

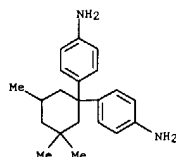
L4 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 345976-55-8 CAPLUS
CN [5,5'-Biisobenzofuran]-1,1',3,3'-tetrone, polymer with
4,4'-oxybis(benzenamine), 3,3'-(1,1,3,3-tetramethyl-1,3-
disiloxanedyl)bis[1-propanamine] and 4,4'-(3,3,5-
trimethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

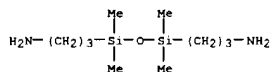
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CRN 138749-44-7
CMF C21 H28 N2



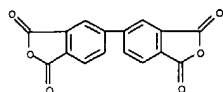
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CMF C10 H28 N2 O Si2

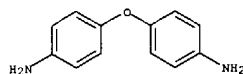


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CRN 2420-87-3
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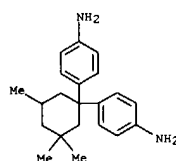


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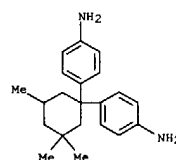
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CMF C12 H12 N2 O

RN 345976-56-9 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-(2,2,2-trifluoro-1-(trifluoromethyl)ethylidene)bis-, polymer with 4,4'-oxybis(benzenamine), 3,3'-(1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis[1-propanamine] and 4,4'-(3,3,5-trimethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

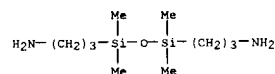
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CMF C21 H28 N2

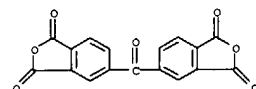
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CRN 2469-55-8
CMF C10 H28 N2 O Si2

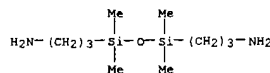
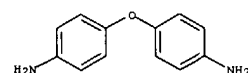
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CMF C10 H28 N2 O Si2

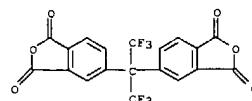
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CRN 2421-28-5
CMF C17 H6 O7

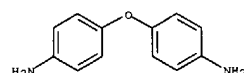
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CRN 101-80-4
CMF C12 H12 N2 O

CM 3

CRN 1107-00-2
CMF C19 H6 F6 O6

CM 4

CRN 101-80-4
CMF C12 H12 N2 O

RN 401616-87-3 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-carbonylbis-, polymer with 4,4'-oxybis(benzenamine), 3,3'-(1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis[1-propanamine] and 4,4'-(3,3,5-trimethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

CM 1

CRN 138749-44-7
CMF C21 H28 N2

L4 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN
AB Polyamic acid are prepared by reacting a mixture containing: at least one tetracarboxylic dianhydride; at least one aromatic diamine; at least one diamine with a siloxane structure, and at least one alkyl or aryl cyclohexylidene dianiline. The polymers have such three-dimensional mol. structures that a significant improvement can be brought about in solvent solubility, thermal resistance, mech. properties, and adhesive properties onto various substrates. The polyamic acid is converted into polyimide through thermal or chemical imidization. The polyimide is suitable for use in adhesives or adhesive tapes for electronic parts.
ACCESSION NUMBER: 2001:464382 CAPLUS
DOCUMENT NUMBER: 135:61779
TITLE: Preparation of siloxane-containing polyamic acids and polyimides useful for adhesives
INVENTOR(S): Kweon, Jeong Min; Kim, Soon Sik; Chang, Kyeong Ho; Lee, Kyung Rok
PATENT ASSIGNEE(S): Saehan Industries Incorporation, S. Korea
SOURCE: U.S., 8 pp.
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6252033	B1	20010626	US 2000-531314	20000320
DE 10008120	A1	20010906	DE 2000-10008120	20000222
DE 10008121	A1	20010906	DE 2000-10008121	20000222
CN 1313350	A	20010919	CN 2000-104040	20000314
CN 1117113	B	20030806		
TW 508360	B	20021101	TW 2000-89108363	20000503

PRIORITY APPLN. INFO.: DE 2000-10008120 A 20000222
US 2000-531314 A 20000320

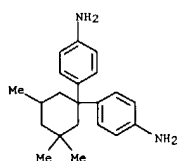
IT 345976-52-5P 345976-53-6P 345976-54-7P
345976-55-8P 345976-56-9P
RL: IMF (Industrial manufacture); PREP (Preparation)
(preparation of siloxane-containing polyamic acids and polyimides useful for adhesives)

RN 345976-52-5 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-sulfonylbis-, polymer with 4,4'-oxybis(benzenamine), 3,3'-(1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis[1-propanamine] and 4,4'-(3,3,5-trimethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

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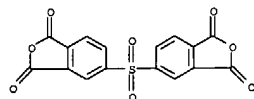
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CMF C21 H28 N2

L4 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



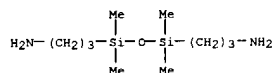
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CMF C16 H6 O8 S



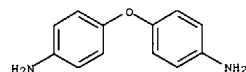
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CRN 2469-55-8
CMF C10 H28 N2 O S12



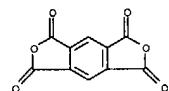
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RN 345976-53-6 CAPLUS

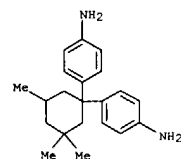
L4 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 345976-54-7 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-oxybis-, polymer with 4,4'-oxybis[benzenamine], 3,3'-(1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis[1-propanamine] and 4,4'-(3,3,5-trimethylcyclohexylidene)bis[benzenamine] (9CI) (CA INDEX NAME)

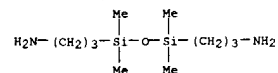
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CMF C21 H28 N2



CM 2

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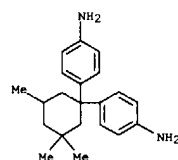
CM 3

CRN 1823-59-2
CMF C16 H6 O7

L4 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
CN 1H,3H-Benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, polymer with 4,4'-oxybis[benzenamine], 3,3'-(1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis[1-propanamine] and 4,4'-(3,3,5-trimethylcyclohexylidene)bis[benzenamine] (9CI) (CA INDEX NAME)

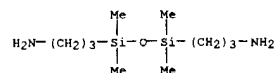
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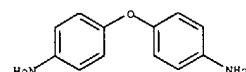
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CMF C10 H28 N2 O S12



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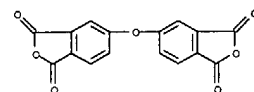
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CMF C12 H12 N2 O



CM 4

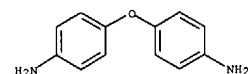
CRN 89-32-7
CMF C10 H2 O6

L4 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



CM 4

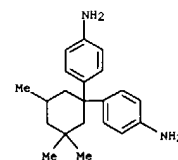
CRN 101-80-4
CMF C12 H12 N2 O



RN 345976-55-8 CAPLUS
CN [5,5'-Biisobenzofuran]-1,1',3,3'-tetrone, polymer with 4,4'-oxybis[benzenamine], 3,3'-(1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis[1-propanamine] and 4,4'-(3,3,5-trimethylcyclohexylidene)bis[benzenamine] (9CI) (CA INDEX NAME)

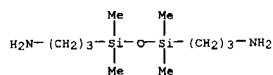
CM 1

CRN 138749-44-7
CMF C21 H28 N2

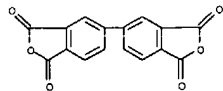


CM 2

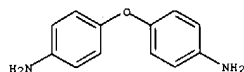
CRN 2469-55-8
CMF C10 H28 N2 O S12



CM 3

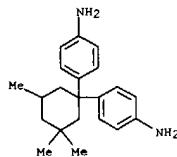
CRN 2420-87-3
CMF C16 H6 O6

CM 4

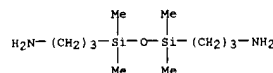
CRN 101-80-4
CMF C12 H12 N2 O

RN 345976-56-9 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-(2,2,2-trifluoro-1-(trifluoromethyl)ethylidene)bis-, polymer with 4,4'-oxybis[benzenamine], 3,3'-(1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis[1-propanamine] and 4,4'-(3,3,5-trimethylcyclohexylidene)bis[benzenamine] (9CI) (CA INDEX NAME)

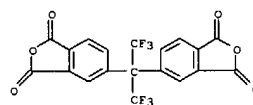
CM 1

CRN 138749-44-7
CMF C21 H28 N2

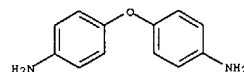
CM 2

CRN 2469-55-8
CMF C10 H28 N2 O S12

CM 3

CRN 1107-00-2
CMF C19 H6 F6 O6

CM 4

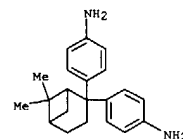
CRN 101-80-4
CMF C12 H12 N2 O

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS

L4 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN
AB The devices comprise a hole transport, an electron transport and/or a phosphor layer comprising a compound having an asym. carbon.
ACCESSION NUMBER: 2001:451350 CAPLUS
DOCUMENT NUMBER: 135:68315
TITLE: Organic electroluminescent devices
INVENTOR(S): Tanaka, Hiromitsu; Mouri, Makoto; Takeuchi, Hisato; Tokito, Seiji
PATENT ASSIGNEE(S): Toyota Central Research and Development Laboratories, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
DOCUMENT TYPE: CODEN: JKXXAF
LANGUAGE: Patent
FAMILY ACC. NUM. COUNT: 1 Japanese
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001167882	A2	20010622	JP 1999-353183	19991213
PRIORITY APPLN. INFO.:			JP 1999-353183	19991213

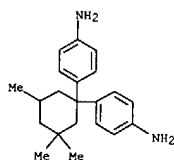
IT 345654-19-5
RL: DEV (Device component use); USES (Uses)
(organic electroluminescent devices)
RN 345654-19-5 CAPLUS
CN Benzenamine, 4,4'-(6,6-dimethylbicyclo[3.1.1]hept-2-ylidene)bis- (9CI)
(CA INDEX NAME)



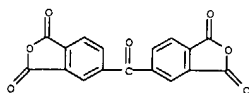
L4 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN
 AB A review with 15 refs. is given on the authors preparation of diamine monomers and polymers followed by data on solubility and phys. properties of the polyimides. A series of novel aromatic diamines containing kinked cycloalkane structures between 2 Ph rings were synthesized by HCl-catalyzed condensation reaction of excess aniline and corresponding cycloalkanone deriva. The structures of the diamines were identified by ¹H NMR, ¹³C NMR, FT-IR spectroscopy, and elemental anal. The polyimides were synthesized from the obtained diamines with various aromatic dianhydrides by one-step polymerization in m-cresol. The polymerization was conducted for 6. apprx. 8 h with refluxing, which was enough to obtain the polymers with high mol. weight. The inherent viscosities of the resulting polyimides were in the range of 0.37. apprx. 1.66 dL/g. All polymers were readily soluble in common organic solvents such as chloroform, tetrachloroethane, dimethylacetamide, etc. and the glass transition tempa. were observed at 290-372°. UV-visible spectra were obtained to measure the transparency of polymer films. Most of the polymers showed high transmission above 90% in the wavelength of 450. apprx. 600 nm.

ACCESSION NUMBER: 1999:717919 CAPLUS
 DOCUMENT NUMBER: 132:50507
 TITLE: Soluble polyimides containing alicyclic structures
 AUTHOR(S): Choi, Kil-yeong; Yi, Mi Hie
 CORPORATE SOURCE: Advanced Materials Division, Korea Research Institute Chemical Technology, Taejeon, 305, S. Korea
 SOURCE: Macromolecular Symposia (1999), 142(Advanced Materials), 193-204
 PUBLISHER: CODEN: MSYMEC; ISSN: 1022-1360
 DOCUMENT TYPE: Wiley-VCH Verlag GmbH
 LANGUAGE: English
 IT 138749-44-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (solubility and thermal properties of soluble polyimides containing alicyclic structures)

RN 138749-44-7 CAPLUS
 CN Benzenamine, 4,4'-(3,3,5-trimethylcyclohexylidene)bis- (9CI) (CA INDEX NAME)

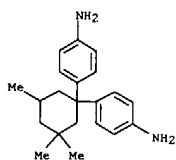


CM 2
 CRN 2421-28-5
 CMF C17 H6 O7



RN 194737-39-8 CAPLUS
 CN [5,5'-Bis(isobenzofuran)-1,1',3,3'-tetrone, polymer with 4,4'-(3,3,5-trimethylcyclohexylidene)bis(benzenamine)] (9CI) (CA INDEX NAME)

CM 1
 CRN 138749-44-7
 CMF C21 H28 N2



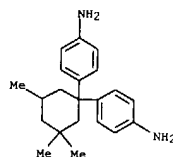
CM 2
 CRN 2420-87-3
 CMF C16 H6 O6

L4 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

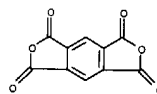
IT 194737-35-4P 194737-37-6P 194737-39-8P
 194737-41-2P 194737-43-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (solubility and thermal properties of soluble polyimides containing alicyclic structures)

RN 194737-35-4 CAPLUS
 CN 1H,3H-Benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, polymer with 4,4'-(3,3,5-trimethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

CM 1
 CRN 138749-44-7
 CMF C21 H28 N2



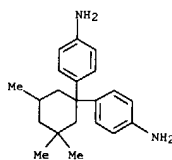
CM 2
 CRN 89-32-7
 CMF C10 H2 O6



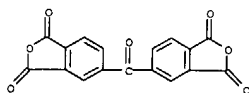
RN 194737-37-6 CAPLUS
 CN 1,3-Isobenzofurandione, 5,5'-carbonylbis-, polymer with 4,4'-(3,3,5-trimethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

CM 1
 CRN 138749-44-7
 CMF C21 H28 N2

L4 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

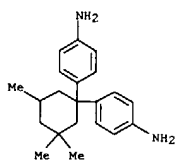


CM 2
 CRN 2421-28-5
 CMF C17 H6 O7



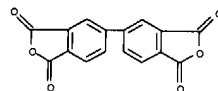
RN 194737-39-8 CAPLUS
 CN [5,5'-Bis(isobenzofuran)-1,1',3,3'-tetrone, polymer with 4,4'-(3,3,5-trimethylcyclohexylidene)bis(benzenamine)] (9CI) (CA INDEX NAME)

CM 1
 CRN 138749-44-7
 CMF C21 H28 N2



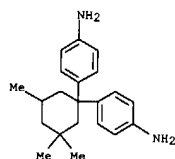
CM 2
 CRN 2420-87-3
 CMF C16 H6 O6

L4 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

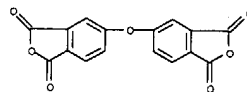


RN 194737-41-2 CAPLUS
 CN 1,3-Isobenzofurandione, 5,5'-oxybis-, polymer with 4,4'-(3,3,5-trimethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

CM 1
 CRN 138749-44-7
 CMF C21 H28 N2

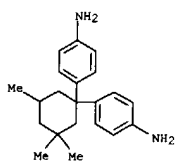


CM 2
 CRN 1823-59-2
 CMF C16 H6 O7



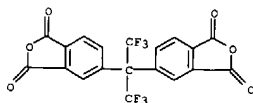
RN 194737-43-4 CAPLUS
 CN 1,3-Isobenzofurandione, 5,5'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis-, polymer with 4,4'-(3,3,5-trimethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

CM 1
 CRN 138749-44-7
 CMF C21 H28 N2



CM 2

CRN 1107-00-2
CMF C19 H6 F6 O6

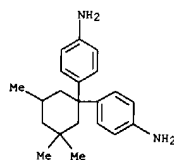


REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS
FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE

L4 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN
AB Novel poly(amide imide)s (PAI) containing alkyl-substituted cyclohexylidene moieties were synthesized by conventional polycondensation of trimellitic anhydride chloride with novel aromatic diamines followed by chemical imidization using acetic anhydride and pyridine. The inherent viscosities of the resulting PAIs are relatively high and range from 71-112 mL g⁻¹. The prepared PAIs show excellent thermal stability and good solubility. The glass transition temps. (T_g) measured by DSC are observed in the range of 312-342°. Furthermore, all the polymers are readily soluble in less hygroscopic organic solvents like cyclohexanone, λ -butyrolactone as well as aprotic polar solvents.

ACCESSION NUMBER: 1998:577019 CAPLUS
DOCUMENT NUMBER: 129:231107
TITLE: Synthesis and characterization of poly(amide imide)s containing cyclohexylidene moieties with bulky substituents
AUTHOR(S): Yi, Mi Hie; Huang, Wen Xi; Choi, Kil-Yeong
CORPORATE SOURCE: Advanced Materials Division, Korea Research Inst. Chem. Technol., Taejeon, 305, S. Korea
SOURCE: Angewandte Makromolekulare Chemie (1998), 258, 5-9
CODEN: ANMCBO; ISSN: 0003-3146
PUBLISHER: Huethig & Wepf Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English

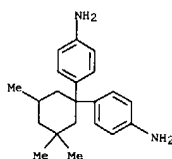
IT 130749-44-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(monomer; preparation and characterization and polymerization of bis(aminophenyl)alkylcyclohexane monomers)
RN 130749-44-7 CAPLUS
CN Benzenamine, 4,4'-(3,3,5-trimethylcyclohexylidene)bis- (9CI) (CA INDEX NAME)



IT 212898-99-2P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and characterization of cardo poly(amide imide)s containing cyclohexylidene moieties with bulky substituents)
RN 212898-99-2 CAPLUS
CN 5-Isobenzofurancarboxyl chloride, 1,3-dihydro-1,3-dioxo-, polymer with 4,4'-(3,3,5-trimethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

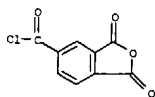
CM 1

CRN 138749-44-7
CMF C21 H28 N2



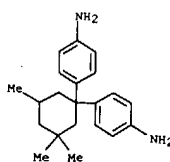
CM 2

CRN 1204-28-0
CMF C9 H3 Cl1 O4



L4 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN
AB A series of 3 aromatic diamines containing kinked cyclohexylidene moieties was synthesized by condensation of excess PhNH₂ with cyclohexanones containing 0, 1, or 3 Me groups. The structures of the cyclohexylidenedianilines were identified by ¹H NMR, ¹³C NMR, and FT-IR spectroscopies. Polyimides were synthesized from the obtained diamines and various aromatic dianhydrides by the conventional polycondensation reaction followed by chemical imidization as well as high-temperature one-step polymerization. The inherent viscosities and weight-average mol. wts. of the polyimides were in the ranges of 0.55-1.58 dL/g and (7.4-15.2) × 10⁴ g/mol, resp. The prepared polyimides showed excellent thermal stabilities and good solubility. All polymers were readily soluble in common organic solvents such as THF, chloroform, tetrachloroethane, etc., and the glass transition temps. were observed at 290-372°.

ACCESSION NUMBER: 1997:565041 CAPLUS
DOCUMENT NUMBER: 127:205985
TITLE: Synthesis and characterization of soluble polyimides from 1,1-bis(4-aminophenyl)cyclohexane derivatives
AUTHOR(S): Yi, Mi Hie; Huang, Wenxi; Jin, Moon Young; Choi, Kil-Yeong
CORPORATE SOURCE: Advanced Materials Division, Korea Research Institute of Chemical Technology, Taejeon, 305-606, S. Korea
SOURCE: Macromolecules (1997), 30(19), 5606-5611
CODEN: MAMOBX; ISSN: 0024-9297
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
IT 130749-44-7P, 1,1-Bis(4-aminophenyl)-3,3,5-trimethylcyclohexane
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(monomer; preparation of soluble polyimides from)
RN 130749-44-7 CAPLUS
CN Benzenamine, 4,4'-(3,3,5-trimethylcyclohexylidene)bis- (9CI) (CA INDEX NAME)

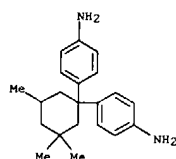


IT 194737-35-4P 194737-37-6P 194737-39-6P
194737-41-2P 194737-43-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of soluble polyimides from 1,1-bis(4-aminophenyl)cyclohexanes)

L4 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
 RN 194737-35-4 CAPLUS
 CN 1H,3H-Benzol[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, polymer with
 4,4'-(3,3,5-trimethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX
 NAME)

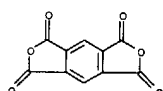
CM 1

CRN 138749-44-7
 CMF C21 H28 N2



CM 2

CRN 89-32-7
 CMF C10 H2 O6

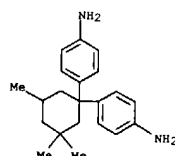


RN 194737-37-6 CAPLUS
 CN 1,3-Isobenzofurandione, 5,5'-carbonylbis-, polymer with
 4,4'-(3,3,5-trimethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX
 NAME)

CM 1

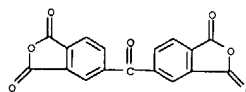
CRN 138749-44-7
 CMF C21 H28 N2

L4 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



CM 2

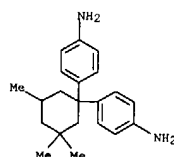
CRN 2421-28-5
 CMF C17 H6 O7



RN 194737-39-8 CAPLUS
 CN [5,5'-Bisobenzofuran]-1,1',3,3'-tetrone, polymer with
 4,4'-(3,3,5-trimethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX
 NAME)

CM 1

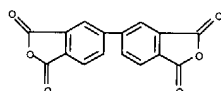
CRN 138749-44-7
 CMF C21 H28 N2



CM 2

CRN 2420-87-3
 CMF C16 H6 O6

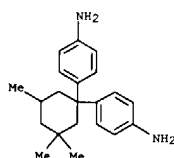
L4 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 194737-41-2 CAPLUS
 CN 1,3-Isobenzofurandione, 5,5'-oxybis-, polymer with 4,4'-(3,3,5-
 trimethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

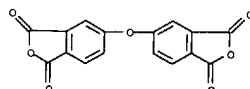
CM 1

CRN 138749-44-7
 CMF C21 H28 N2



CM 2

CRN 1823-59-2
 CMF C16 H6 O7

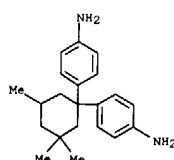


RN 194737-43-4 CAPLUS
 CN 1,3-Isobenzofurandione, 5,5'-[2,2,2-trifluoro-1-
 (trifluoromethyl)ethylidene]bis-, polymer with 4,4'-(3,3,5-
 trimethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

CM 1

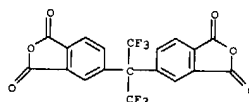
CRN 138749-44-7
 CMF C21 H28 N2

L4 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



CM 2

CRN 1107-00-2
 CMF C19 H6 F6 O6



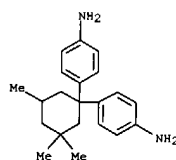
L4 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN
 GI For diagram[s], see printed CA Issue.
 AB The diamines I (R1, R2 = H, Cl, Br, alkyl, cycloalkyl, aryl, aralkyl; R3, R4 = H, alkyl (but ≥ 1 C atom must bear 2 alkyl groups); m = 4-7), useful in polymerization, are prepared. Thus, HCl-catalyzed condensation of 11 mol dihydroisophorone with 66 mol PhNH2 at 140° gave 1045 g 4,4'-(3,3,5-trimethylcyclohexylidene)dianiline (II). Mixing 7.7 g II in DMF with a DMF solution of prepolymer from 600 g polypropylene glycol (OH number 112) and 268 g IPDI, casting the solution on glass, and drying at 100-150° gave a film with softening point (DSC) 206°.

ACCESSION NUMBER: 1992:84366 CAPLUS
 DOCUMENT NUMBER: 116:84366
 TITLE: Preparation and use of (cycloalkylidene)dianilines
 INVENTOR(S): Waldmann, Helmut; Leyrer, Ulrich; Mueller, Hans Peter;
 Idel, Karsten Josef; Casser, Carl; Fengler, Gerd; Westeppe, Uwe
 PATENT ASSIGNEE(S): Bayer A.-G., Germany
 SOURCE: Ger. Offen., 10 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

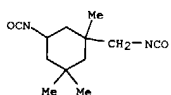
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4014847	A1	19911114	DE 1990-4014847	19900509
PRIORITY APPLN. INFO.: DE 1990-4014847 19900509				
OTHER SOURCE(S): MARPAT 116:84366				
IT 138749-45-0P 138749-46-9P 138749-47-0P 138749-48-1P				
RI: PRP (Properties); PREP (Preparation) (preparation and properties of)				
RN 138749-45-8 CAPLUS				
CN Benzenamine, 4,4'-(3,3,5-trimethylcyclohexylidene)bis-, polymer with α -hydro- ω -hydroxypoly[oxy(methyl-1,2-ethanediyl)] and 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane (9CI) (CA INDEX NAME)				

CM 1

CRN 138749-44-7
 CMF C21 H28 N2



L4 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
 CRN 4098-71-9
 CMF C12 H18 N2 O2



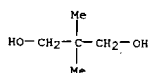
CM 3

CRN 629-11-8
 CMF C6 H14 O2

HO-(CH2)6-OH

CM 4

CRN 126-30-7
 CMF C5 H12 O2



CM 5

CRN 124-04-9
 CMF C6 H10 O4

HO2C-(CH2)4-CO2H

RN 138749-47-0 CAPLUS
 CN Hexanedioic acid, polymer with 1,4-butanediol, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and 4,4'-(3,3,5-trimethylcyclohexylidene)bis[benzenamine] (9CI) (CA INDEX NAME)

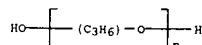
CM 1

CRN 138749-44-7
 CMF C21 H28 N2

L4 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

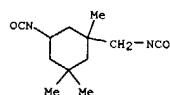
CM 2

CRN 25322-69-4
 CMF (C3 H6 O)n H2 O
 CCI IDS, PMS



CM 3

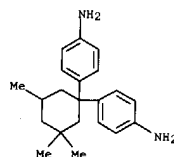
CRN 4098-71-9
 CMF C12 H18 N2 O2



RN 138749-46-9 CAPLUS
 CN Hexanedioic acid, polymer with 2,2-dimethyl-1,3-propanediol, 1,6-hexanediol, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and 4,4'-(3,3,5-trimethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

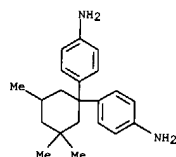
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CRN 138749-44-7
 CMF C21 H28 N2



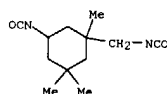
CM 2

L4 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



CM 2

CRN 4098-71-9
 CMF C12 H18 N2 O2



CM 3

CRN 124-04-9
 CMF C6 H10 O4

HO2C-(CH2)4-CO2H

CM 4

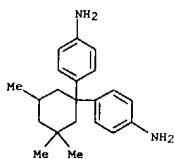
CRN 110-63-4
 CMF C4 H10 O2

HO-(CH2)4-OH

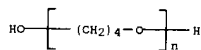
RN 138749-48-1 CAPLUS
 CN Benzenamine, 4,4'-(3,3,5-trimethylcyclohexylidene)bis-, polymer with α -hydro- ω -hydroxypoly[oxy-1,4-butanediyl] and 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane (9CI) (CA INDEX NAME)

CM 1

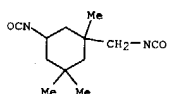
CRN 138749-44-7



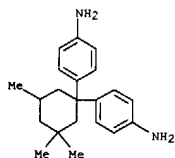
CM 2
CRN 25190-06-1
CMF (C4 H8 O)n H2 O
CCI PMS



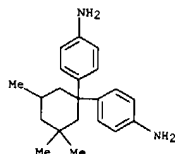
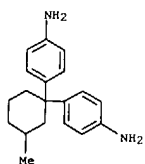
CM 3
CRN 4098-71-9
CMF C12 H18 N2 O2



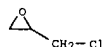
IT 138749-49-2P
RL: PREP (Preparation)
(preparation of crosslinked, and properties of)
RN 138749-49-2 CAPLUS
CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane
and 4,4'-(3,3,5-trimethylcyclohexylidene)bis(benzenamine) (9CI) (CA
INDEX NAME)
CM 1
CRN 138749-44-7
CMF C21 H28 N2



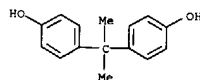
RN 138966-59-3 CAPLUS
CN Benzenamine, 4,4'-(3-methylcyclohexylidene)bis- (9CI) (CA INDEX NAME)



CM 2
CRN 106-89-8
CMF C3 H5 Cl O



CM 3
CRN 80-05-7
CMF C15 H16 O2



IT 138749-44-7P 138966-59-3P
RL: PREP (Preparation)
(preparation of, for polymerization)
RN 138749-44-7 CAPLUS
CN Benzenamine, 4,4'-(3,3,5-trimethylcyclohexylidene)bis- (9CI) (CA INDEX
NAME)

=> fil reg
COST IN U.S. DOLLARS
FULL ESTIMATED COST

SINCE FILE ENTRY	TOTAL SESSION
34.61	190.51

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE ENTRY	TOTAL SESSION
-4.85	-4.85

CA SUBSCRIBER PRICE

FILE 'REGISTRY' ENTERED AT 17:52:13 ON 29 APR 2004
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 27 APR 2004 HIGHEST RN 677274-15-6
DICTIONARY FILE UPDATES: 27 APR 2004 HIGHEST RN 677274-15-6

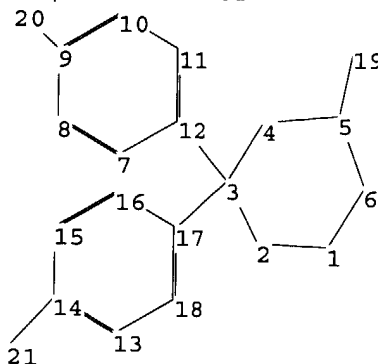
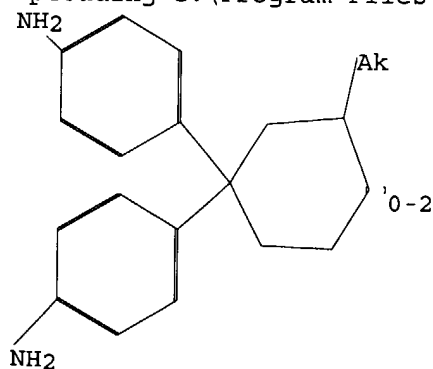
TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>
Uploading C:\Program Files\Stnexp\Queries\10620766.str



chain nodes :

19 20 21

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

chain bonds :

3-12 3-17 5-19 9-20 14-21

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18
14-15 15-16 16-17 17-18

exact/norm bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-19 9-20 14-21

exact bonds :

3-12 3-17

normalized bonds :

7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18 14-15 15-16 16-17 17-18

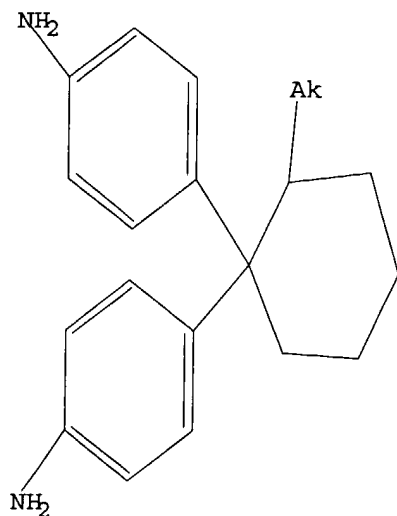
Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS
20:CLASS 21:CLASS

L5 STRUCTURE UPLOADED

=> d query

L5 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l5

SAMPLE SEARCH INITIATED 17:53:21 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 216 TO ITERATE

100.0% PROCESSED 216 ITERATIONS

SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 3439 TO 5201

PROJECTED ANSWERS: 0 TO 0

L6 0 SEA SSS SAM L5

=> s l5 ful

FULL SEARCH INITIATED 17:53:25 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 3807 TO ITERATE

100.0% PROCESSED 3807 ITERATIONS
SEARCH TIME: 00.00.01

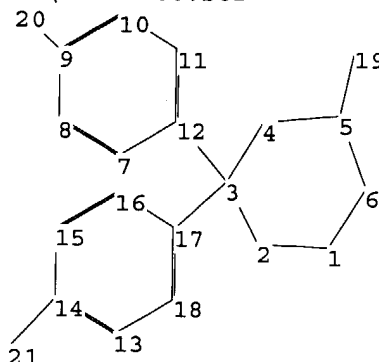
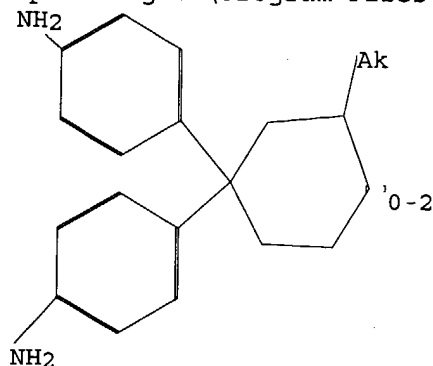
0 ANSWERS

L7 0 SEA SSS FUL L5

=>

=>

Uploading C:\Program Files\Stnexp\Queries\10620766.str



chain nodes :

19 20 21

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

chain bonds :

3-12 3-17 5-19 9-20 14-21

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18
14-15 15-16 16-17 17-18

exact/norm bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-19 9-20 14-21

exact bonds :

3-12 3-17

normalized bonds :

7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18 14-15 15-16 16-17 17-18

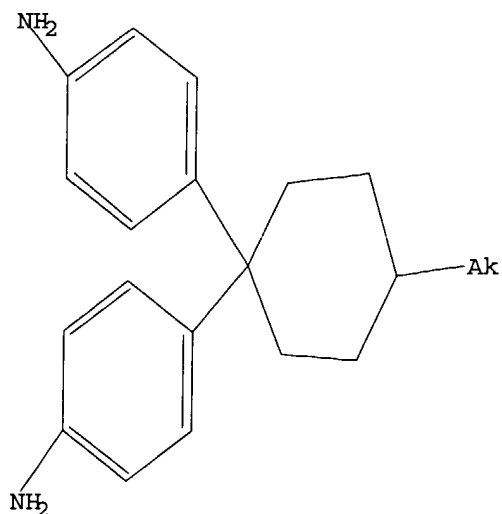
Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS
20:CLASS 21:CLASS

L8 STRUCTURE UPLOADED

=> d query

L8 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l8

SAMPLE SEARCH INITIATED 17:54:16 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 216 TO ITERATE

100.0% PROCESSED 216 ITERATIONS
SEARCH TIME: 00.00.01

3 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 3439 TO 5201
PROJECTED ANSWERS: 3 TO 163

L9 3 SEA SSS SAM L8

=> s l8 full

FULL SEARCH INITIATED 17:54:21 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 3807 TO ITERATE

100.0% PROCESSED 3807 ITERATIONS
SEARCH TIME: 00.00.01

58 ANSWERS

L10 58 SEA SSS FUL L8

=> fil caplus

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
311.68	502.19

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
0.00	-4.85

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FILE 'CAPLUS' ENTERED AT 17:54:24 ON 29 APR 2004
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FILE COVERS 1907 - 29 Apr 2004 VOL 140 ISS 18
FILE LAST UPDATED: 28 Apr 2004 (20040428/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l10

L11 14 L10

=> d l11 1-14 abs ibib hitstr

L11 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN
 AB The title agent contains polymers of polyamic acids and of imide derived from polyamic acids, wherein the polymer contains substituted or non-substituted biphenyl, naphthyl, phenanthrenyl, dibenzofuranyl, and anthracenyl groups, and has main chain of C28, C23 perfluoroalkyl, C26,1-cycloalkylene, or 23 ring of polycyclic group, -R-X-A group (R = C23 hydrocarbon; X = single bond, -O-, -CO-, etc.; A = halo, cyano, fluoroalkyl, etc.), or -R1-X1-R2-X2-R3 (R1-3 = C23 hydrocarbon, -(SiO)n-,; n25; X1-2 = single bond, -O-, -CO-, etc.). The agent provides good liquid crystal alignment such as elimination of a ghost image of liquid crystal displays

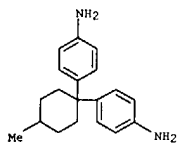
ACCESSION NUMBER: 2004:76765 CAPLUS
 DOCUMENT NUMBER: 140:154558
 TITLE: Liquid crystal-aligning agent for liquid crystal display device
 INVENTOR(S): Shimizu, Shigeo; Ota, Yoshihisa
 PATENT ASSIGNEE(S): JSR Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 63 pp.
 CODEN: JXXXXF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004027201	A2	20040129	JP 2003-113959	20030418
NL 1023305	A1	20031031	NL 2003-1023305	20030429
US 2004031950	A1	20040219	US 2003-424728	20030429
PRIORITY APPLN. INFO.:			JP 2002-128209	A 20020430
			JP 2003-113959	A 20030418

IT 652141-06-5P 652141-07-6P 652141-08-7P
 652141-09-8P 652141-65-6P 652141-66-7P
 652141-67-8P 652141-68-9P
 RI: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USSS (Uses)
 (Liquid crystal-aligning agent for liquid crystal display device)
 RN 652141-06-5 CAPLUS
 CN 1H,3H-Furo[3',4':3,4]cyclopenta[1,2-c]pyran-1,3,5,7-tetrone, hexahydro-, polymer with 2,2'-dimethyl[1,1'-biphenyl]-4,4'-diamine and 4,4'-(4-methylcyclohexylidene)bis[benzenamine] (9CI) (CA INDEX NAME)

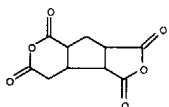
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CRN 194737-18-3
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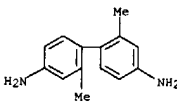
L11 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

CRN 87078-75-9
 CMP C10 H8 O6



CM 3

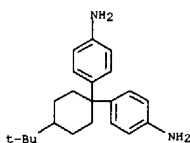
CRN 84-67-3
 CMP C14 H16 N2



RN 652141-08-7 CAPLUS
 CN 1H,3H-Furo[3',4':3,4]cyclopenta[1,2-c]pyran-1,3,5,7-tetrone, hexahydro-, polymer with 2,2'-dimethyl[1,1'-biphenyl]-4,4'-diamine and 4,4'-(4-(1,1-dimethylethyl)cyclohexylidene)bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 138966-60-6
 CMP C22 H30 N2



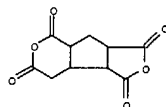
CM 2

CRN 87078-75-9

L11 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

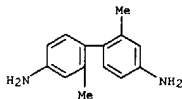
CM 2

CRN 87078-75-9
 CMP C10 H8 O6



CM 3

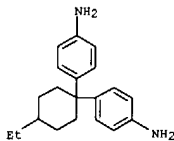
CRN 84-67-3
 CMP C14 H16 N2



RN 652141-07-6 CAPLUS
 CN 1H,3H-Furo[3',4':3,4]cyclopenta[1,2-c]pyran-1,3,5,7-tetrone, hexahydro-, polymer with 2,2'-dimethyl[1,1'-biphenyl]-4,4'-diamine and 4,4'-(4-ethylcyclohexylidene)bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

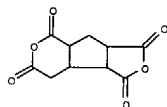
CRN 207984-94-9
 CMP C20 H26 N2



CM 2

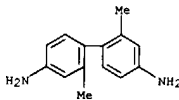
L11 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

CMF C10 H8 O6



CM 3

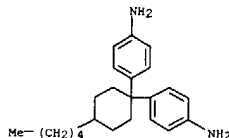
CRN 84-67-3
 CMP C14 H16 N2



RN 652141-09-8 CAPLUS
 CN 1H,3H-Furo[3',4':3,4]cyclopenta[1,2-c]pyran-1,3,5,7-tetrone, hexahydro-, polymer with 2,2'-dimethyl[1,1'-biphenyl]-4,4'-diamine and 4,4'-(4-pentylcyclohexylidene)bis[benzenamine] (9CI) (CA INDEX NAME)

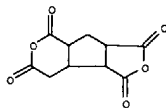
CM 1

CRN 226697-52-5
 CMP C23 H32 N2

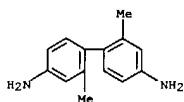


CM 2

CRN 87078-75-9
 CMP C10 H8 O6

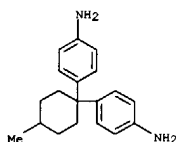


CM 3

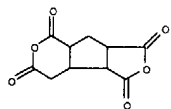
CRN 84-67-3
CMF C14 H16 N2

RN 652141-65-6 CAPLUS
CN 1H,3H-Furo[3',4':3,4]cyclopenta[1,2-c]pyran-1,3,5,7-tetrone, hexahydro-, polymer with 4,4'-(4-methylcyclohexylidene)bis(benzenamine) and 2,7-phenanthrenediamine (9CI) (CA INDEX NAME)

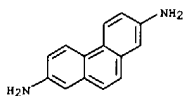
CM 1

CRN 194737-18-3
CMF C19 H24 N2

CM 2

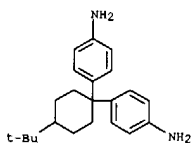
CRN 87078-75-9
CMF C10 H8 O6

CM 3

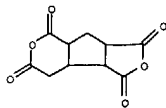
CRN 62245-46-9
CMF C14 H12 N2

RN 652141-67-8 CAPLUS
CN 1H,3H-Furo[3',4':3,4]cyclopenta[1,2-c]pyran-1,3,5,7-tetrone, hexahydro-, polymer with 4,4'-(4-(1,1-dimethylethyl)cyclohexylidene)bis(benzenamine) and 2,7-phenanthrenediamine (9CI) (CA INDEX NAME)

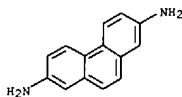
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CRN 138966-60-6
CMF C22 H30 N2

CM 2

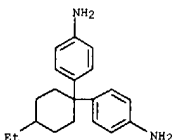
CRN 87078-75-9
CMF C10 H8 O6

CM 3

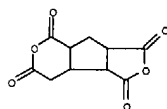
CRN 62245-46-9
CMF C14 H12 N2

RN 652141-66-7 CAPLUS
CN 1H,3H-Furo[3',4':3,4]cyclopenta[1,2-c]pyran-1,3,5,7-tetrone, hexahydro-, polymer with 4,4'-(4-ethylcyclohexylidene)bis(benzenamine) and 2,7-phenanthrenediamine (9CI) (CA INDEX NAME)

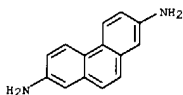
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CRN 207984-94-9
CMF C20 H26 N2

CM 2

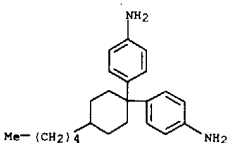
CRN 87078-75-9
CMF C10 H8 O6

CM 3

CRN 62245-46-9
CMF C14 H12 N2

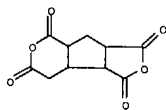
RN 652141-68-9 CAPLUS
CN 1H,3H-Furo[3',4':3,4]cyclopenta[1,2-c]pyran-1,3,5,7-tetrone, hexahydro-, polymer with 4,4'-(4-pentylcyclohexylidene)bis(benzenamine) and 2,7-phenanthrenediamine (9CI) (CA INDEX NAME)

CM 1

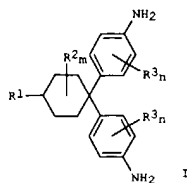
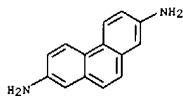
CRN 226697-52-5
CMF C23 H32 N2

CM 2

CRN 87078-75-9
CMF C10 H8 O6



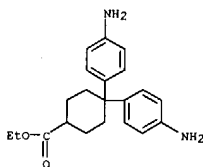
CM 3

CRN 62245-46-9
CMF C14 H12 N2

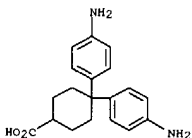
AB Title compds. I (R1 = H, C1-5 alkyl, CO2R4; R2, R3 = H, C1-5 alkyl; m, n = 0-4; R4 = H, C1-5 alkyl) are prepared by reaction of corresponding cyclohexanones with anilines in the presence of acid catalysts at 80-300°. A mixture of 1.96 g cyclohexanone, 64.8 g PhNH2, and PhNH2.HCl was heated under reflux for 3 h to give 3.35 g 1,1-bis(4-aminophenyl)cyclohexane.

ACCESSION NUMBER: 2003:750680 CAPLUS
DOCUMENT NUMBER: 139:261037
TITLE: Preparation of bis(4-aminophenyl)cyclohexanes as intermediates for pharmaceuticals and liquid crystals
INVENTOR(S): Isokawa, Soro; Kotani, Makoto; Enomoto, Katashi; Nagai, Tadashi
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

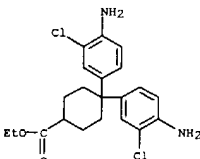
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003267934	A2	20030925	JP 2002-73802	20020318
PRIORITY APPLN. INFO.: CASREACT 139:261037; MARPAT 139:261037				
OTHER SOURCE(S):				
IT 601490-36-2P 601490-37-3P 601490-38-4P				
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)				
(Preparation of bis(aminophenyl)cyclohexanes from cyclohexanones and anilines)				
RN	601490-36-2	CAPLUS		
CN	Cyclohexanecarboxylic acid, 4,4-bis(4-aminophenyl)-, ethyl ester (9CI) (CA INDEX NAME)			



RN 601490-37-3 CAPLUS
CN Cyclohexanecarboxylic acid, 4,4-bis(4-aminophenyl)- (9CI) (CA INDEX NAME)



RN 601490-38-4 CAPLUS
CN Cyclohexanecarboxylic acid, 4,4-bis(4-amino-3-chlorophenyl)-, ethyl ester (9CI) (CA INDEX NAME)



AB The polyamic acids and polyimides are manufactured by polymerization of 2,1 tetracarboxylic dianhydride, 2,1 aromatic diamine, 2,1 diamine having siloxane units RSiMe2(OSiMe2)nR (R = C1-20 alkylene; n = 1-20), and

4-R-substituted cyclohexylidene dianiline and/or 3,3,5-trimethylcyclohexylidene dianiline (R = Me, Et, CMe3, CMe2CH2CH3, phenyl). Thus, a solution of a polyamic acid prepared from oxydianiline, trimethylcyclohexylidene dianiline, bis(3-aminopropyl)tetramethyldisiloxane, and 3,3',4,4'-benzophenonetetracarboxylic acid dianhydride was applied on a glass plate, dried, and heated at 300° for 1 h to give a polyimide film with Tg 305°, modulus of elasticity 4900 N/mm2, and tensile strength 105.8 N/mm2. An adhesive tape, useful for electronic parts, etc., containing a polyimide prepared from the polyamic acid showed improved adhesion at high temp and good solubility in organic solvents.

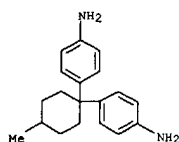
ACCESSION NUMBER: 2002:147688 CAPLUS
DOCUMENT NUMBER: 136:201334
TITLE: Manufacture of polyamic acids and polyimides with three dimensional structure and their adhesive tapes
INVENTOR(S): Kwon, Jeong Min; Kim, Soon Sik; Chang, Kyeong Ho; Lee, Kyung Rok
PATENT ASSIGNEE(S): Saehan Industries Inc., S. Korea
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002060489	A2	20020226	JP 2000-239006	20000807
PRIORITY APPLN. INFO.: JP 2000-239006 20000807				
IT 345976-57-0P 345976-58-1P 345976-59-2P				
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)				
(manufacture of polyamic acids and polyimides with three dimensional structure for adhesive tapes)				
RN	345976-57-0	CAPLUS		
CN	1,3-Isobenzofurandione, 5,5'-carbonylbis-, polymer with 4,4'-(4-methylcyclohexylidene)bis[benzenamine], 4,4'-oxybis[benzenamine] and 3,3'-(1,1,3,3-tetramethyl-1,3-disiloxanediy)bis[1-propanamine] (9CI) (CA INDEX NAME)			

CM 1

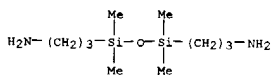
CRN 194737-18-3
CMF C19 H24 N2

L11 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



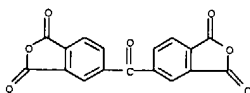
CM 2

CRN 2469-55-8
CMF C10 H28 N2 O S12



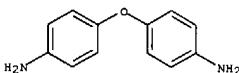
CM 3

CRN 2421-28-5
CMF C17 H6 O7



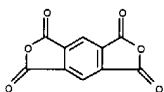
CM 4

CRN 101-80-4
CMF C12 H12 N2 O



RN 345976-58-1 CAPLUS
CN 1H,3H-Benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, polymer with 4,4'-(4-methylcyclohexylidene)bis(benzenamine), 4,4'-oxybis(benzenamine)

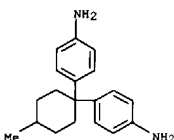
L11 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 345976-59-2 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-oxybis-, polymer with 4,4'-(4-methylcyclohexylidene)bis(benzenamine), 4,4'-oxybis(benzenamine) and 3,3'-(1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis[1-propanamine] (9CI)
(CA INDEX NAME)

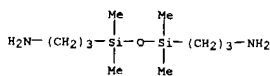
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CRN 194737-18-3
CMF C19 H24 N2



CM 2

CRN 2469-55-8
CMF C10 H28 N2 O S12



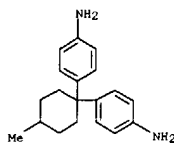
CM 3

CRN 1823-59-2
CMF C16 H6 O7

L11 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
and 3,3'-(1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis[1-propanamine] (9CI)
(CA INDEX NAME)

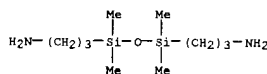
CM 1

CRN 194737-18-3
CMF C19 H24 N2



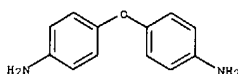
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CRN 2469-55-8
CMF C10 H28 N2 O S12



CM 3

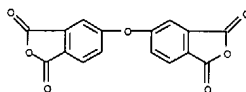
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CMF C12 H12 N2 O



CM 4

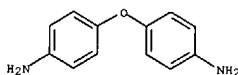
CRN 89-32-7
CMF C10 H2 O6

L11 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



CM 4

CRN 101-80-4
CMF C12 H12 N2 O



L11 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN

AB Polyamic acid are prepared by reacting a mixture containing: at least one tetracarboxylic dianhydride; at least one aromatic diamine; at least one diamine with a siloxane structure, and at least one alkyl or aryl cyclohexylidene dianiline. The polymers have such three-dimensional mol. structures that a significant improvement can be brought about in solvent solubility, thermal resistance, mech. properties, and adhesive properties onto various substrates. The polyamic acid is converted into polyimide through

thermal or chemical imidization. The polyimide is suitable for use in adhesives or adhesive tapes for electronic parts.

ACCESSION NUMBER: 2001:464382 CAPLUS

DOCUMENT NUMBER: 135:61779

TITLE: Preparation of siloxane-containing polyamic acids and polyimides useful for adhesives

INVENTOR(S): Kweon, Jeong Min; Kim, Soon Sik; Chang, Kyeong Ho;

Lee, Kyung Rok

PATENT ASSIGNEE(S): Saehan Industries Incorporation, S. Korea

SOURCE: U.S., 8 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6252033	B1	20010626	US 2000-531314	20000320
DE 10008120	A1	20010906	DE 2000-10008120	20000222
DE 10008121	A1	20010906	DE 2000-10008121	20000222
CN 1313350	A	20010919	CN 2000-104040	20000314
CN 1117113	B	20030806		
TW 508360	B	20021101	TW 2000-89108363	20000503
			DE 2000-10008120 A	20000222
			US 2000-531314 A	20000320

PRIORITY APPLN. INFO.:

IT 345976-57-0P 345976-58-1P 345976-59-2P

RL: IMF (Industrial manufacture); PREP (Preparation)

(preparation of siloxane-containing polyamic acids and polyimides useful for adhesives)

RN 345976-57-0 CAPLUS

CN 1,3-Isobenzofurandione, 5,5'-carbonylbis-, polymer with 4,4'-(4-methylcyclohexylidene)bis[benzenamine], 4,4'-oxybis[benzenamine] and 3,3'-(1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis[1-propanamine] (9CI) (CA INDEX NAME)

CM 1

CRN 194737-18-3

CMF C19 H24 N2

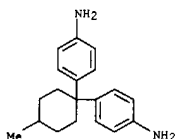
L11 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

and 3,3'-(1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis[1-propanamine] (9CI) (CA INDEX NAME)

CM 1

CRN 194737-18-3

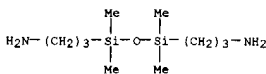
CMF C19 H24 N2



CM 2

CRN 2469-55-8

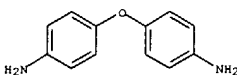
CMF C10 H28 N2 O Si2



CM 3

CRN 101-80-4

CMF C12 H12 N2 O

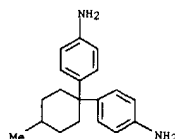


CM 4

CRN 89-32-7

CMF C10 H2 O6

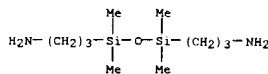
L11 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



CM 2

CRN 2469-55-8

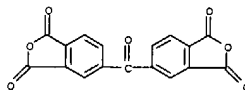
CMF C10 H28 N2 O Si2



CM 3

CRN 2421-28-5

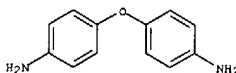
CMF C17 H6 O7



CM 4

CRN 101-80-4

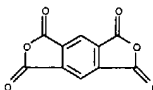
CMF C12 H12 N2 O



RN 345976-58-1 CAPLUS

CN 1H,3H-Benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, polymer with 4,4'-(4-methylcyclohexylidene)bis[benzenamine], 4,4'-oxybis[benzenamine]

L11 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



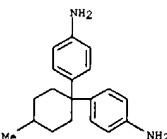
RN 345976-59-2 CAPLUS

CN 1,3-Isobenzofurandione, 5,5'-oxybis-, polymer with 4,4'-(4-methylcyclohexylidene)bis[benzenamine], 4,4'-oxybis[benzenamine] and 3,3'-(1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis[1-propanamine] (9CI) (CA INDEX NAME)

CM 1

CRN 194737-18-3

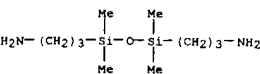
CMF C19 H24 N2



CM 2

CRN 2469-55-8

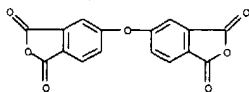
CMF C10 H28 N2 O Si2



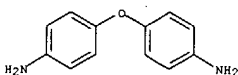
CM 3

CRN 1823-59-2

CMF C16 H6 O7



CM 4

CRN 101-80-4
CMF C12 H12 N2 O

REFERENCE COUNT:

4

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

AB The resins have a cardo-type polymer structure in which at least 0.1% of the H atoms of the pendant benzyl and/or allyl groups have been replaced by a halogen or contain a polymer in which at least 34% of the H atoms of the pendant benzyl and/or allyl groups have been replaced by a halogen. The resins not only have good solvent solubility, easiness of film

formation by a wet process, thermal stability, chemical stability, etc., but also have better performance with respect to gas permeability and gas selectivity, and are useful for gas separation membranes with good permeability and selectivity. Thus, mixing 9,9-bis(3',5'-dimethyl-4'-aminophenyl)fluorene 650 with 3,3',4,4'-biphenyltetracarboxylic dianhydride 468 in NMP 5500 g at room temperature for 1 h, heating the resulting solution at 180° for

7 h

while removing water, diluting the product with 18 L NMP, cooling, transferring into 100 L MeOH, washing the resulting precipitate with MeOH and drying gave a cardo-type polyimide which was then brominated using NBS (N-bromosuccinimide) and AIBN in dichloroethane to give a resin with bromination degree 27.6%. Dissolving 5 g this resin in 50 mL NMP, casting the resulting solution on a glass surface, drying at 50° for 10 h, detaching the cast film by dipping in water, drying at 50° in vacuo for 3 days, extracting the residual NMP with MeOH and drying again gave a membrane with CO₂ permeability 647x10⁻¹⁸ m³·m/(m²·s·P a) (86.2 bar) and N permeability 18.0x10⁻¹⁸ m³·m/(m²·s·cntdo t.Pa) (2.4 bar).

ACCESSION NUMBER:

2000:688140 CAPLUS

DOCUMENT NUMBER:

133:282653

TITLE:

Halogenated cardo-type resins for permselective gas separation membranes and process for producing the same

INVENTOR(S):

Tachiki, Akira; Mano, Hiroshi; Haraya, Kenji

PATENT ASSIGNEE(S):

Japan as Represented by Director General of Agency of Industrial Science and, Japan; Research Institute of Innovative Technology for the Earth; Nippon Steel Corporation; Sumitomo Electric Industries, Ltd.

SOURCE:

PCT Int. Appl., 134 pp.
CODEN: PFXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

1

PATENT INFORMATION:

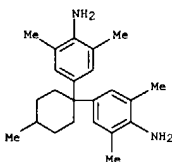
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000056430	A1	20000928	WO 2000-JP1751	20000322
W: CA, JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1213049	A1	20020612	EP 2000-911286	20000322
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
US 6531569	B1	20030311	US 2001-937143	20010921
PRIORITY APPLN. INFO.:			JP 1999-77894	A 19990323
			WO 2000-JP1751	W 20000322
IT 299217-52-ODP, halogenated and optionally functionalized				
RL: DEV (Device component use); IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)				

process for producing same)

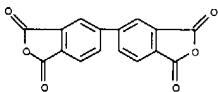
RN 299217-52-0 CAPLUS

CN [5,5'-Bis(isobenzofuran)-1,1',3,3'-tetrone, polymer with 4,4'-(4-methylcyclohexylidene)bis[2,6-dimethylbenzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 299217-51-9
CMF C23 H32 N2

CM 2

CRN 2420-87-3
CMF C16 H6 O6

REFERENCE COUNT:

6

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

AB A review with 15 refs. is given on the authors preparation of diamine monomers

and polymers followed by data on solubility and phys. properties of the polyimides. A series of novel aromatic diamines containing kinked cycloalkane

structures between 2 Ph rings were synthesized by HCl-catalyzed condensation reaction of excess aniline and corresponding cycloalkanone derivs. The structures of the diamines were identified by ¹H NMR, ¹³C NMR, FT-IR spectroscopy, and elemental anal. The polyimides were synthesized from the obtained diamines with various aromatic dianhydrides by one-step polymerization in m-cresol. The polymerization was conducted for 6.apprx.8 h with refluxing, which was enough to obtain the polymers with high mol. weight

The inherent viscosities of the resulting polyimides were in the range of 0.37.apprx.1.66 dL/g. All polymers were readily soluble in common organic solvents such as chloroform, tetrachloroethane, dimethylacetamide, etc. and the glass transition temps. were observed at 290-372°. UV-visible spectra were obtained to measure the transparency of polymer films. Most of the polymers showed high transmission above 90% in the wavelength of 450.apprx.600 nm.

ACCESSION NUMBER:

1999:717919 CAPLUS

DOCUMENT NUMBER:

132:50507

TITLE:

Soluble polyimides containing alicyclic structures

AUTHOR(S):

Choi, Kil-Yeong; Yi, Mi Hie

CORPORATE SOURCE:

Advanced Materials Division, Korea Research Institute Chemical Technology, Taejeon, 305, S. Korea

SOURCE:

Macromolecular Symposia (1999), 142(Advanced

Polymeric

Materials), 193-204

CODEN: MSYMEC; ISSN: 1022-1360

PUBLISHER:

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DOCUMENT TYPE:

Journal: General Review

LANGUAGE:

English

IT 138966-60-6P 194737-18-3P 207984-94-9P

207984-96-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

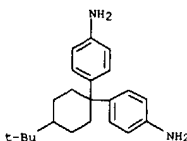
(solubility and thermal properties of soluble polyimides containing

alicyclic

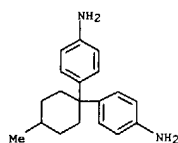
structures)

RN 138966-60-6 CAPLUS

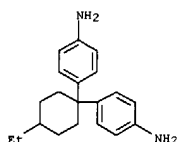
CN Benzenamine, 4,4'-[4-(1,1-dimethylethyl)cyclohexylidene]bis- (9CI) (CA INDEX NAME)



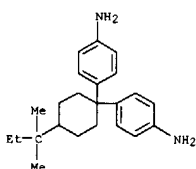
L11 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
 RN 194737-18-3 CAPLUS
 CN Benzenamine, 4,4'-(4-methylcyclohexylidene)bis- (9CI) (CA INDEX NAME)



RN 207984-94-9 CAPLUS
 CN Benzenamine, 4,4'-(4-ethylcyclohexylidene)bis- (9CI) (CA INDEX NAME)

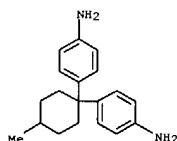


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 CN Benzenamine, 4,4'-(4-(1,1-dimethylpropyl)cyclohexylidene)bis- (9CI) (CA INDEX NAME)

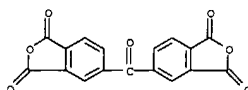


IT 194737-25-2P 194737-27-4P 194737-29-6P
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 207985-12-4P 207985-16-8P 207985-18-0P
 207985-20-4P 207985-22-6P 207985-24-8P
 207985-29-3P 207985-33-9P 207985-39-5P
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L11 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

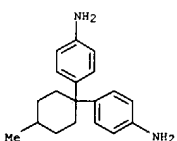


CM 2
 CRN 2421-28-5
 CMF C17 H6 O7



RN 194737-29-6 CAPLUS
 CN [5,5'-Bis(benzofuran)-1,1',3,3'-tetrone, polymer with 4,4'-(4-methylcyclohexylidene)bis(benzenamine)] (9CI) (CA INDEX NAME)

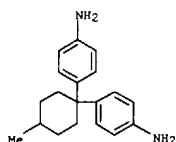
CM 1
 CRN 194737-18-3
 CMF C19 H24 N2



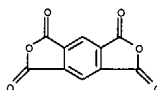
CM 2
 CRN 2420-87-3
 CMF C16 H6 O6

L11 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (solv. and thermal properties of sol. polyimides contg. alicyclic structures)
 RN 194737-25-2 CAPLUS
 CN 1H,3H-Benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, polymer with 4,4'-(4-methylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

CM 1
 CRN 194737-18-3
 CMF C19 H24 N2



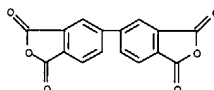
CM 2
 CRN 89-32-7
 CMF C10 H2 O6



RN 194737-27-4 CAPLUS
 CN 1,3-Isobenzofurandione, 5,5'-carbonylbis-, polymer with 4,4'-(4-methylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

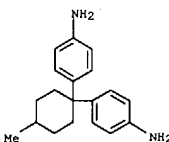
CM 1
 CRN 194737-18-3
 CMF C19 H24 N2

L11 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

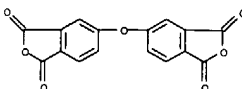


RN 194737-31-0 CAPLUS
 CN 1,3-Isobenzofurandione, 5,5'-oxybis-, polymer with 4,4'-(4-methylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

CM 1
 CRN 194737-18-3
 CMF C19 H24 N2

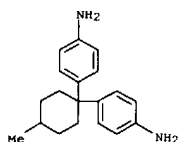


CM 2
 CRN 1823-59-2
 CMF C16 H6 O7



RN 194737-33-2 CAPLUS
 CN 1,3-Isobenzofurandione, 5,5'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis-, polymer with 4,4'-(4-methylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

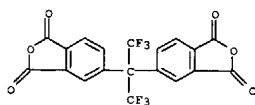
CM 1
 CRN 194737-18-3
 CMF C19 H24 N2



CM 2

CRN 1107-00-2

CMF C19 H6 F6 O6



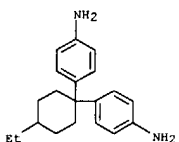
RN 207984-98-3 CAPLUS

CN 1H,3H-Benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, polymer with 4,4'-(4-ethylcyclohexylidene)bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 207984-94-9

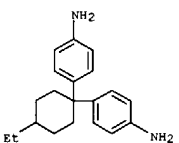
CMF C20 H26 N2



CM 2

CRN 89-32-7

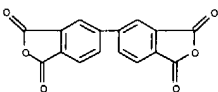
CMF C10 H2 O6



CM 2

CRN 2420-87-3

CMF C16 H6 O6



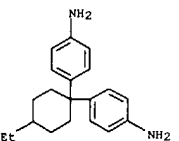
RN 207985-08-8 CAPLUS

CN 1,3-Isobenzofurandione, 5,5'-(2,2,2-trifluoro-1-(trifluoromethyl)ethylidene)bis-, polymer with 4,4'-(4-ethylcyclohexylidene)bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 207984-94-9

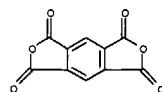
CMF C20 H26 N2



CM 2

CRN 1107-00-2

CMF C19 H6 F6 O6



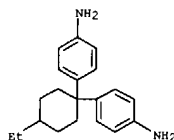
RN 207985-02-2 CAPLUS

CN 1,3-Isobenzofurandione, 5,5'-carbonylbis-, polymer with 4,4'-(4-ethylcyclohexylidene)bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 207984-94-9

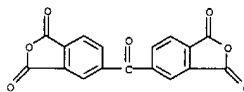
CMF C20 H26 N2



CM 2

CRN 2421-28-5

CMF C17 H6 O7



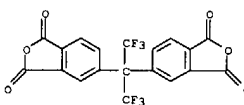
RN 207985-06-6 CAPLUS

CN [5,5'-Biisobenzofuran]-1,1',3,3'-tetrone, polymer with 4,4'-(4-ethylcyclohexylidene)bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 207984-94-9

CMF C20 H26 N2



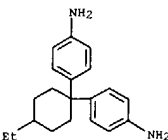
RN 207985-12-4 CAPLUS

CN 1,3-Isobenzofurandione, 5,5'-oxybis-, polymer with 4,4'-(4-ethylcyclohexylidene)bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 207984-94-9

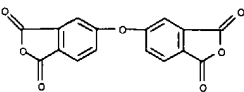
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CM 2

CRN 1823-59-2

CMF C16 H6 O7



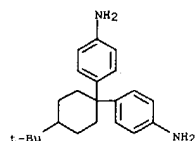
RN 207985-16-8 CAPLUS

CN 1H,3H-Benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, polymer with 4,4'-(4-(1,1-dimethylethyl)cyclohexylidene)bis[benzenamine] (9CI) (CA INDEX NAME)

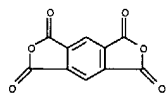
CM 1

CRN 138966-60-6

CMF C22 H30 N2

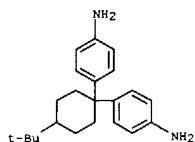


CM 2

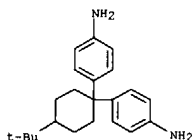
CRN 89-32-7
CMF C10 H2 O6

RN 207985-18-0 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-carbonylbis-, polymer with 4,4'-[4-(1,1-dimethylethyl)cyclohexylidene]bis[benzenamine] (9CI) (CA INDEX NAME)

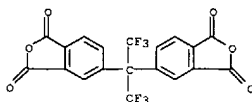
CM 1

CRN 138966-60-6
CMF C22 H30 N2

CM 2

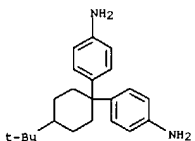
CRN 2421-28-5
CMF C17 H6 O7

CM 2

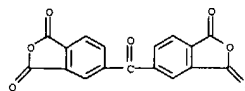
CRN 1107-00-2
CMF C19 H6 F6 O6

RN 207985-24-8 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-oxybis-, polymer with 4,4'-[4-(1,1-dimethylethyl)cyclohexylidene]bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

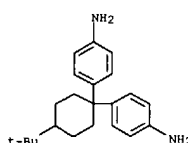
CRN 138966-60-6
CMF C22 H30 N2

CM 2

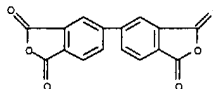
CRN 1823-59-2
CMF C16 H6 O7

RN 207985-20-4 CAPLUS
CN [5,5'-Bis(isobenzofuran)-1,1',3,3'-tetrone, polymer with 4,4'-[4-(1,1-dimethylethyl)cyclohexylidene]bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

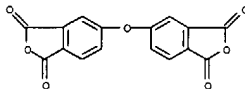
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CMF C22 H30 N2

CM 2

CRN 2420-87-3
CMF C16 H6 O6

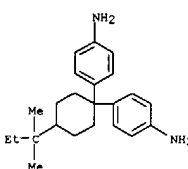
RN 207985-22-6 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis-, polymer with 4,4'-[4-(1,1-dimethylethyl)cyclohexylidene]bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

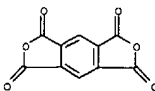
CRN 138966-60-6
CMF C22 H30 N2

RN 207985-29-3 CAPLUS
CN 1H,3H-Benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, polymer with 4,4'-[4-(1,1-dimethylpropyl)cyclohexylidene]bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 207984-96-1
CMF C23 H32 N2

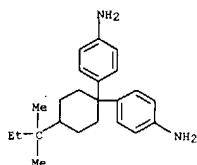
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CRN 89-32-7
CMF C10 H2 O6

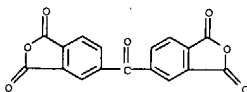
RN 207985-33-9 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-carbonylbis-, polymer with 4,4'-[4-(1,1-dimethylpropyl)cyclohexylidene]bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 207984-96-1
CMF C23 H32 N2

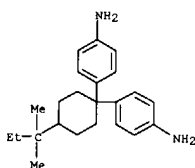


CM 2

CRN 2421-28-5
CMF C17 H6 O7

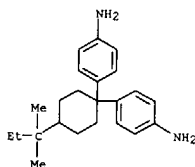
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CN [5,5'-Bis(isobenzofuran)-1,1',3,3'-tetrone, polymer with 4,4'-[4-(1,1-dimethylpropyl)cyclohexylidene]bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

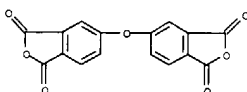
CRN 207984-96-1
CMF C23 H32 N2

CM 2

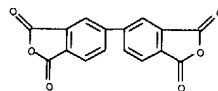
CRN 2420-87-3



CM 2

CRN 1823-59-2
CMF C16 H6 O7

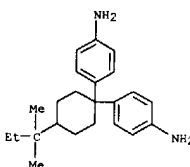
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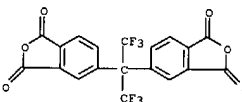
RN 207985-41-9 CAPLUS

CN 1,3-Isobenzofurandione, 5,5'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis-, polymer with 4,4'-[4-(1,1-dimethylpropyl)cyclohexylidene]bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 207984-96-1
CMF C23 H32 N2

CM 2

CRN 1107-00-2
CMF C19 H6 F6 O6

RN 207985-43-1 CAPLUS

CN 1,3-Isobenzofurandione, 5,5'-oxybis-, polymer with 4,4'-[4-(1,1-dimethylpropyl)cyclohexylidene]bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 207984-96-1

AB We prepared photo-crosslinkable polyimide (PI) film, which contains CF₃ moiety. The ketone peak (at 1678cm⁻¹) of PI was decreased and broad hydroxyl bond appeared. The decrease of ketone peak was also confirmed with UV-visible spectroscopy. The dichroic ratio of LC cell was obtained.

The LC mols. are uniformly aligned perpendicular to polarization direction of irradiated light on PI layers. The pretilt angle of LC on alignment films was obtained to be about 3.3°.

ACCESSION NUMBER: 1999:580908 CAPLUS

DOCUMENT NUMBER: 131:299962

TITLE: A study on pretilt angle of liquid crystal with polarized UV light irradiation on soluble polyimide alignment films
AUTHOR(S): Shin, Dong-Myung; Park, Mi-Kyoung; Yi, Mi-Hie; Choi, Kil-Yeong

CORPORATE SOURCE: Dept. of Chem. Eng., Hong-Ik University, Seoul, 121-791, S. Korea

SOURCE: Molecular Crystals and Liquid Crystals Science and Technology, Section A: Molecular Crystals and Liquid Crystals (1999), 327, 153-156

PUBLISHER: CODEN: MCLCE9; ISSN: 1058-725X
Gordon & Breach Science Publishers

DOCUMENT TYPE: Journal
LANGUAGE: English

IT 247177-63-5

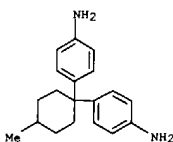
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(pretilt angle of liquid crystal with polarized UV light irradiation on soluble polyimide alignment films)

RN 247177-63-5 CAPLUS

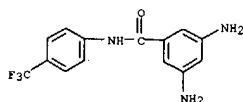
CN Benzamide, 3,5-diamino-N-[4-(trifluoromethyl)phenyl]-, polymer with 5,5'-carbonylbis[1,3-isobenzofurandione] and 4,4'-[4-methylcyclohexylidene]bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 194737-18-3
CMF C19 H24 N2

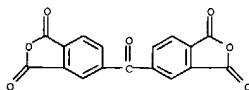
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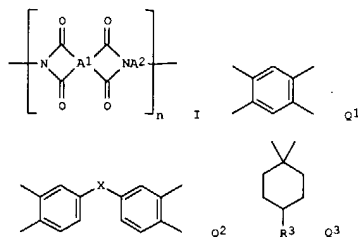


CM 3

CRN 2421-28-5
CMF C17 H6 07



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT



AB The polyimides have repeating units I derived from aromatic tetracarboxylic dianhydrides and aromatic diamines [A1 = Q1, Q2; X = CO, O, none, C(CF3)2, O-1,3-C6H4O; A2 = 1,4-C6H4Z-1,4-C6H4, 1,4-C6H4, 1,3-C6H4, 1,3-C6H4O-1,4-C6H4SO2-1,4-C6H4O-1,3-C6H4; Z = Q3, O, CH2, O-1,4-C6H4SO2-1,4-C6H4O; R3 = (un)substituted C1-6 alkyl, (un)substituted Ph]. The polyimides are manufactured by solution polymerization of (A) and (B).

Z1 aromatic tetracarboxylic dianhydrides selected from pyromellitic dianhydride, benzophenonetetracarboxylic dianhydride, oxydiphthalic dianhydride, biphenyltetracarboxylic dianhydride, hexafluoroisopropylidenediphthalic dianhydride, and hydroquinonebis(phthalic dianhydride) with (B) diamines containing H2N-1,4-C6H4Q3-1,4-C6H4NH2 and optionally oxydianiline, methylenedianiline, m-bis(aminophenoxy)diphenyl sulfone, and/or p-bis(aminophenoxy)diphenyl sulfone. Thus, 2.80 g 4-(aminocyclohexyl)dimethylacetamide and 2.18 g pyromellitic dianhydride were polymerized at 70° for 2 h and then under refluxing for 6-12 h in dimethylacetamide containing isopropanol to give a polyimide with intrinsic viscosity (0.5 g/dL in m-cresol) 1.18 dL/g, Tg 349°, thermal decomposition temperature 520°, and good solubility to various solvents.

ACCESSION NUMBER: 1999:365724 CAPLUS
DOCUMENT NUMBER: 131:19493
TITLE: Soluble aromatic polyimides with high transparency and good heat resistance
INVENTOR(S): Choi, Won-Kil; Lee, Mi-He; Hwang, Won-Si
PATENT ASSIGNEE(S): Korea Research Institute of Chemical Technology, S. Korea
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11152332	A2	19990608	JP 1998-272419	19980529
JP 3012903	B2	20000228		
US 6031067	A	20000229	US 1998-86387	19980529
PRIORITY APPLN. INFO.:			KR 1997-21577	A 19970529

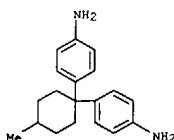
PRIORITY APPLN. INFO.: KR
IT 194737-25-2P 194737-27-4P 194737-29-6P

RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)
(aromatic polyimides with high transparency, good heat resistance, and
good solubility to various solvents)

RN 194737-25-2 CAPLUS
 CN 1H,3H-Benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, polymer with
 4,4'-(4-methylcyclohexylidene)bis[benzenamine] (9CI) (CA INDEX NAME)

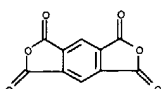
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CRN 194737-18-3
CMF C19 H24 N2



CM 2

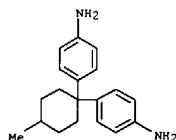
CRN 89-32-7
CMF C10 H2 O6



RN 194737-27-4 CAPLUS

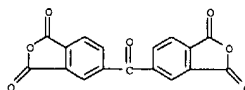
CM 1

CRN 194737-18-3
CMF C19 H24 N2



CM 2

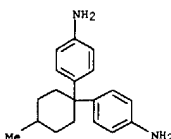
CRN 2421-28-5
CMF C17 H6 O7



RN 194737-29-6 CAPLUS
CN {5,5'-Biisobenzofuran}-1,1',3,3'-tetrone, polymer with
4,4'-(4-methylcyclohexylidene)bis(benzenamine) [9CI] (CA INDEX NAME)

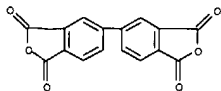
CM 1

CRN 194737-18-3
CMF C19 H24 N2



L11 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
CM 2

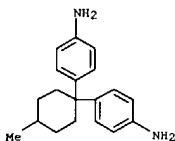
CRN 2420-87-3
CMF C16 H6 O6



RN 194737-31-0 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-(4,4'-methylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

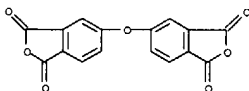
CM 1

CRN 194737-18-3
CMF C19 H24 N2



CM 2

CRN 1823-59-2
CMF C16 H6 O7

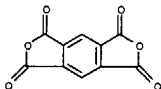


RN 194737-33-2 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-(2,2,2-trifluoro-1-(trifluoromethyl)ethylidene)bis-, polymer with 4,4'-(4-methylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

CM 1

CRN 194737-18-3

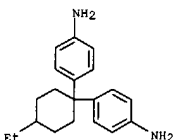
L11 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 207985-02-2 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-(4,4'-ethylcyclohexylidene)bis-, polymer with 4,4'-(4-ethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

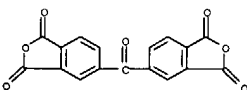
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CRN 207984-94-9
CMF C20 H26 N2



CM 2

CRN 2421-28-5
CMF C17 H6 O7

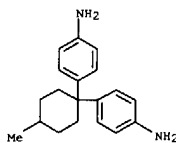


RN 207985-06-6 CAPLUS
CN [5,5'-Bisobenzofuran]-1,1',3,3'-tetrone, polymer with 4,4'-(4-ethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

CM 1

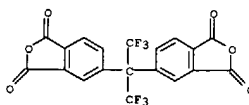
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CMF C20 H26 N2

L11 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
CMF C19 H24 N2



CM 2

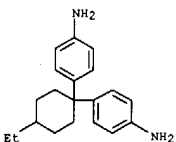
CRN 1107-00-2
CMF C19 H6 F6 O6



RN 207984-98-3 CAPLUS
CN 1H,3H-Benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, polymer with 4,4'-(4-ethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

CM 1

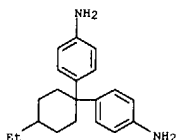
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CMF C20 H26 N2



CM 2

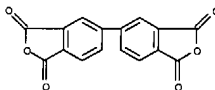
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CMF C10 H2 O6

L11 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



CM 2

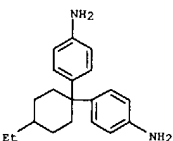
CRN 2420-87-3
CMF C16 H6 O6



RN 207985-08-8 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-(2,2,2-trifluoro-1-(trifluoromethyl)ethylidene)bis-, polymer with 4,4'-(4-ethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

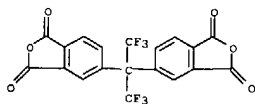
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CRN 207984-94-9
CMF C20 H26 N2



CM 2

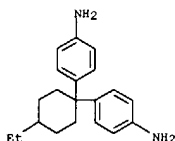
CRN 1107-00-2
CMF C19 H6 F6 O6



RN 207985-12-4 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-oxybis-, polymer with 4,4'-(4-ethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

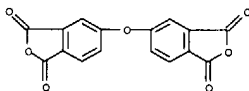
CM 1

CRN 207984-94-9
CMF C20 H26 N2



CM 2

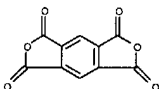
CRN 1823-59-2
CMF C16 H6 O7



RN 207985-14-6 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-[1,3-phenylenebis(oxy)]bis-, polymer with 4,4'-(4-ethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

CM 1

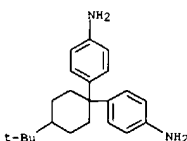
CRN 207984-94-9
CMF C20 H26 N2



RN 207985-18-0 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-carbonylbis-, polymer with 4,4'-(4-(1,1-dimethylethyl)cyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

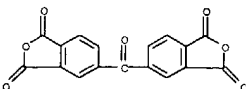
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CRN 138966-60-6
CMF C22 H30 N2



CM 2

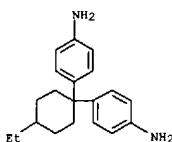
CRN 2421-28-5
CMF C17 H6 O7



RN 207985-20-4 CAPLUS
CN [5,5'-Biisobenzofuran]-1,1',3,3'-tetrone, polymer with 4,4'-(4-(1,1-dimethylethyl)cyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

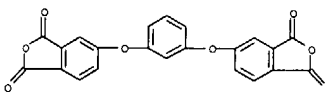
CM 1

CRN 138966-60-6
CMF C22 H30 N2



CM 2

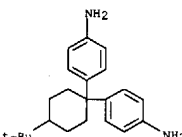
CRN 18959-92-7
CMF C22 H10 O8



RN 207985-16-8 CAPLUS
CN 1H,3H-Benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, polymer with 4,4'-(4-(1,1-dimethylethyl)cyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

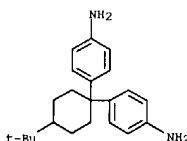
CM 1

CRN 138966-60-6
CMF C22 H30 N2



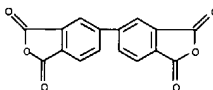
CM 2

CRN 89-32-7
CMF C10 H2 O6



CM 2

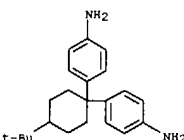
CRN 2420-87-3
CMF C16 H6 O6



RN 207985-22-6 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis-, polymer with 4,4'-(4-(1,1-dimethylethyl)cyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

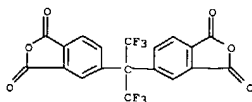
CM 1

CRN 138966-60-6
CMF C22 H30 N2



CM 2

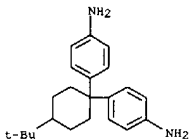
CRN 1107-00-2
CMF C19 H6 F6 O6



RN 207985-24-8 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-oxybis-, polymer with 4,4'-(1,1-dimethylethyl)cyclohexylidenebis[benzenamine] (9CI) (CA INDEX NAME)

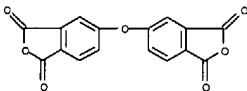
CM 1

CRN 138966-60-6
CMF C22 H30 N2



CM 2

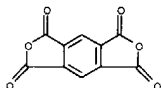
CRN 1823-59-2
CMF C16 H6 O7



RN 207985-26-0 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-[1,3-phenylenebis(oxy)]bis-, polymer with 4,4'-(4-(1,1-dimethylethyl)cyclohexylidene)bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

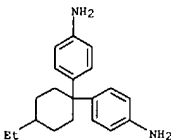
CRN 138966-60-6
CMF C22 H30 N2



RN 226697-58-1 CAPLUS
CN 1H,3H-Benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, polymer with 4,4'-(4-ethylcyclohexylidene)bis[benzenamine] and 4,4'-oxybis[benzenamine] (9CI) (CA INDEX NAME)

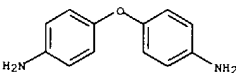
CM 1

CRN 207984-94-9
CMF C20 H26 N2



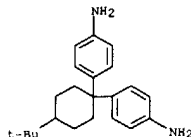
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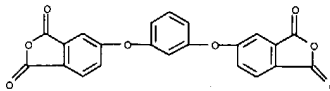
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CRN 89-32-7
CMF C10 H2 O6



CM 2

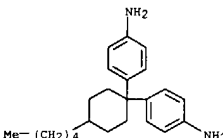
CRN 18959-92-7
CMF C22 H10 O8



RN 226697-53-6 CAPLUS
CN 1H,3H-Benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, polymer with 4,4'-(4-pentylcyclohexylidene)bis[benzenamine] (9CI) (CA INDEX NAME)

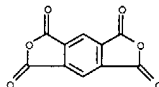
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CRN 226697-52-5
CMF C23 H32 N2



CM 2

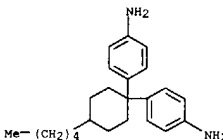
CRN 89-32-7
CMF C10 H2 O6



RN 226697-61-6 CAPLUS
CN [5,5'-Bisobenzofuran]-1,1',3,3'-tetrone, polymer with 4,4'-(4-pentylcyclohexylidene)bis[benzenamine] (9CI) (CA INDEX NAME)

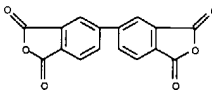
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CM 2

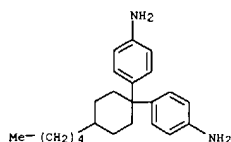
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CMF C16 H6 O6



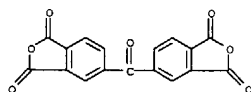
RN 226697-65-0 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-carbonylbis-, polymer with 4,4'-(4-pentylcyclohexylidene)bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 226697-52-5
CMF C23 H32 N2

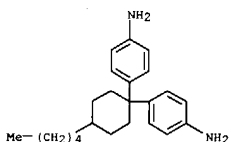


CM 2
CRN 2421-28-5
CMF C17 H6 O7

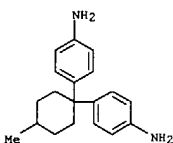


RN 226697-69-4 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis-, polymer with 4,4'-(4-pentylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

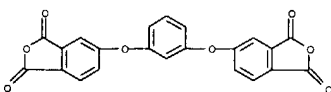
CM 1
CRN 226697-52-5
CMF C23 H32 N2



CM 2
CRN 1107-00-2
CMF C19 H6 F6 O6

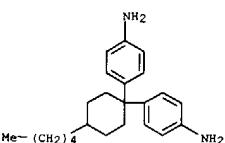


CM 2
CRN 18959-92-7
CMF C22 H10 O8

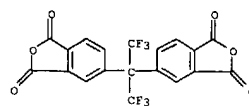


RN 226697-79-6 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-[1,3-phenylenebis(oxy)]bis-, polymer with 4,4'-(4-pentylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

CM 1
CRN 226697-52-5
CMF C23 H32 N2

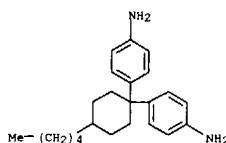


CM 2
CRN 18959-92-7
CMF C22 H10 O8

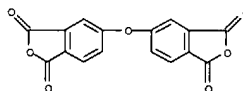


RN 226697-73-0 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-oxybis-, polymer with 4,4'-(4-pentylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

CM 1
CRN 226697-52-5
CMF C23 H32 N2

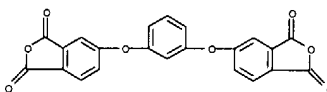


CM 2
CRN 1823-59-2
CMF C16 H6 O7



RN 226697-75-2 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-[1,3-phenylenebis(oxy)]bis-, polymer with 4,4'-(4-methylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

CM 1
CRN 194737-18-3
CMF C19 H24 N2



L11 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN
 AB Novel poly(amide imide)s (PAI) containing alkyl-substituted cyclohexylidene

moieties were synthesized by conventional polycondensation of trimellitic anhydride chloride with novel aromatic diamines followed by chemical imidization

using acetic anhydride and pyridine. The inherent viscosities of the resulting PAIs are relatively high and range from 71-112 mL g⁻¹. The prepared PAIs show excellent thermal stability and good solubility. The

glass transition temps. (T_g) measured by DSC are observed in the range of 312-342°. Furthermore, all the polymers are readily soluble in less hygroscopic organic solvents like cyclohexanone, γ -butyrolactone as well as aprotic polar solvents.

ACCESSION NUMBER: 1998:577019 CAPLUS

DOCUMENT NUMBER: 129:231107

TITLE: Synthesis and characterization of poly(amide imide)s containing cyclohexylidene moieties with bulky substituents

AUTHOR(S): Yi, Mi Hye; Huang, Wen Xi; Choi, Kil-Yeong
 CORPORATE SOURCE: Advanced Materials Division, Korea Research Inst. Chem. Technol., Taejeon, 305, S. Korea

SOURCE: Angewandte Makromolekulare Chemie (1998), 258, 5-9
 CODEN: ANMCBO; ISSN: 0003-3146

PUBLISHER: Huethig & Wepf Verlag

DOCUMENT TYPE: Journal

LANGUAGE: English

IT 138966-60-6P 194737-18-3P, 1,1-Bis(4-aminophenyl)-4-

methylcyclohexane 207984-94-9P, 1,1-Bis(4-aminophenyl)-4-

ethylcyclohexane 207984-96-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

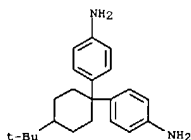
(monomer; preparation and characterization and polymerization of

bis(aminophenyl)alkylcyclohexane monomers)

RN 138966-60-6 CAPLUS

CN Benzenamine, 4,4'-[4-(1,1-dimethylethyl)cyclohexylidene]bis- (9CI) (CA

INDEX NAME)



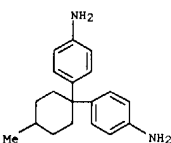
RN 194737-18-3 CAPLUS

CN Benzenamine, 4,4'-[4-methylcyclohexylidene]bis- (9CI) (CA INDEX NAME)

L11 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

CRN 194737-18-3

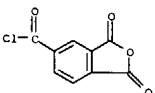
CMF C19 H24 N2



CM 2

CRN 1204-28-0

CMF C9 H3 Cl O4



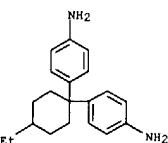
RN 212898-95-8 CAPLUS

CN 5-Isobenzofurancarboxyl chloride, 1,3-dihydro-1,3-dioxo-, polymer with 4,4'-[4-ethylcyclohexylidene]bis(benzenamine) (9CI) (CA INDEX NAME)

CM 1

CRN 207984-94-9

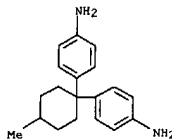
CMF C20 H26 N2



CM 2

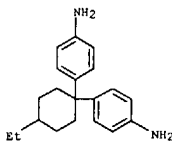
CRN 1204-28-0

L11 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (continued)



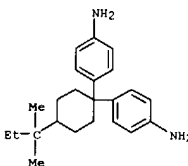
RN 207984-94-9 CAPLUS

CN Benzenamine, 4,4'-[4-ethylcyclohexylidene]bis- (9CI) (CA INDEX NAME)



RN 207984-96-1 CAPLUS

CN Benzenamine, 4,4'-[4-(1,1-dimethylpropyl)cyclohexylidene]bis- (9CI) (CA INDEX NAME)



IT 212898-94-7P 212898-95-8P 212898-97-0P

212898-98-1P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)

(preparation and characterization of cardo poly(amide imide)s

containing cyclohexylidene moieties with bulky substituents)

RN 212898-94-7 CAPLUS

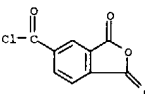
CN 5-Isobenzofurancarboxyl chloride, 1,3-dihydro-1,3-dioxo-, polymer with

4,4'-[4-methylcyclohexylidene]bis(benzenamine) (9CI) (CA INDEX NAME)

CM 1

L11 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

CMF C9 H3 Cl O4



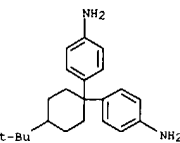
RN 212898-97-0 CAPLUS

CN 5-Isobenzofurancarboxyl chloride, 1,3-dihydro-1,3-dioxo-, polymer with 4,4'-[4-(1,1-dimethylethyl)cyclohexylidene]bis(benzenamine) (9CI) (CA INDEX NAME)

CM 1

CRN 138966-60-6

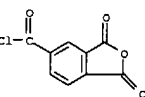
CMF C22 H30 N2



CM 2

CRN 1204-28-0

CMF C9 H3 Cl O4

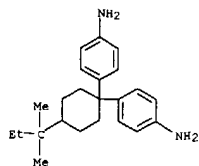


RN 212898-98-1 CAPLUS

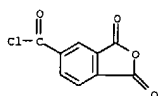
CN 5-Isobenzofurancarboxyl chloride, 1,3-dihydro-1,3-dioxo-, polymer with 4,4'-[4-(1,1-dimethylpropyl)cyclohexylidene]bis(benzenamine) (9CI) (CA INDEX NAME)

CM 1

CRN 207984-96-1

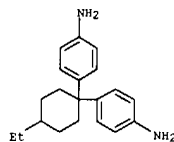


CM 2
CRN 1204-28-0
CMF C9 H3 Cl O4



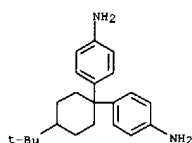
L11 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN
AB A series of novel aromatic diamines containing kinked cyclohexylidene moieties was synthesized by a HCl-catalyzed condensation reaction of excess aniline and the corresponding alkyl-substituted cyclohexanone derivs. at 120-140° for 24 h. The structure of monomers was identified by 1H-NMR, 13C-NMR, and FT-IR, after preparation in yields of above 70%. Polyimides were synthesized from the obtained diamines and various aromatic dianhydrides by one-step polymerization in m-cresol at 200° for 6-8 h. The inherent viscosity of the soluble polyimides was 0.74-1.66 dL/g and the polyimides showed excellent thermal stability; all polymers were readily soluble in common organic solvents such as dimethylacetamide, DMF, THF, chloroform, etc. and the glass transition temperature is 261-348°. The solubility and the glass transition temperature of the polymers increased as the bulkiness of the alkyl-substituents increased.

ACCESSION NUMBER: 1998:330574 CAPLUS
DOCUMENT NUMBER: 129:28286
TITLE: Synthesis and characterization of soluble polyimides containing cyclohexylidene moiety with various alkyl-substituents
AUTHOR(S): Yi, Mi Hie; Huang, Wenxi; Jung, Jin Tae; Kwon, Suk Ki; Choi, Kil-Yeong
CORPORATE SOURCE: Advanced Materials Division, Korea Research Institute of Chemical Technology, Taejeon, 305-606, S. Korea
SOURCE: Journal of Macromolecular Science, Pure and Applied Chemistry (1998), A35(5), 843-855
CODEN: JSPCE6; ISSN: 1060-1325
PUBLISHER: Marcel Dekker, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
IT 207984-94-9, 1,1-Bis(4-aminophenyl)-4-ethylcyclohexane
RL: RCT (Reactant); RACT (Reactant or reagent)
monomer; preparation and characterization of soluble kinked polyimides containing alkyl-cyclohexylidene
RN 207984-94-9 CAPLUS
CN Benzenamine, 4,4'-[(4-ethylcyclohexylidene)bis- (9CI) (CA INDEX NAME)

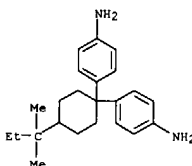


IT 138966-60-6P, 1,1-Bis(4-aminophenyl)-4-tert-butylcyclohexane
207984-96-1P, 1,1-Bis(4-aminophenyl)-4-tert-butylcyclohexane
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

L11 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
(monomer; prepn. and characterization of sol. kinked polyimides contg. alkyl-cyclohexylidene)
RN 138966-60-6 CAPLUS
CN Benzenamine, 4,4'-[(1,1-dimethylethyl)cyclohexylidene]bis- (9CI) (CA INDEX NAME)



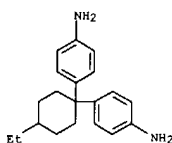
RN 207984-96-1 CAPLUS
CN Benzenamine, 4,4'-[(1,1-dimethylpropyl)cyclohexylidene]bis- (9CI) (CA INDEX NAME)



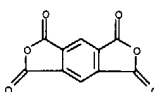
IT 207984-98-3P, 1,1-Bis(4-aminophenyl)-4-ethylcyclohexane-pyromellitic dianhydride copolymer 207985-02-2P, 3,3',4,4'-Benzophenonetetracarboxylic dianhydride-1,1-bis(4-aminophenyl)-4-ethylcyclohexane copolymer 207985-06-6P, 3,3',4,4'-Biphenyltetracarboxylic dianhydride-1,1-bis(4-aminophenyl)-4-ethylcyclohexane copolymer 207985-08-8P, 2,2-Bis(3,4-dicarboxyphenyl)hexafluoropropane dianhydride-1,1-bis(4-aminophenyl)-4-ethylcyclohexane copolymer 207985-12-4P, 1,1-Bis(4-aminophenyl)-4-ethylcyclohexane-3,3',4,4'-tetracarboxyphenyl oxide dianhydride copolymer 207985-14-6P, 1,4-Bis(3,4-dicarboxyphenoxy)benzene dianhydride-1,1-bis(4-aminophenyl)-4-ethylcyclohexane copolymer 207985-16-8P, 1,1-Bis(4-aminophenyl)-4-tert-butylcyclohexane-pyromellitic dianhydride copolymer 207985-18-0P, 3,3',4,4'-Benzophenonetetracarboxylic dianhydride-1,1-bis(4-aminophenyl)-4-tert-butylcyclohexane copolymer 207985-20-4P, 3,3',4,4'-Biphenyltetracarboxylic dianhydride-1,1-bis(4-aminophenyl)-4-tert-butylcyclohexane copolymer 207985-22-6P, 2,2-Bis(3,4-dicarboxyphenyl)hexafluoropropane dianhydride-1,1-bis(4-aminophenyl)-4-tert-butylcyclohexane copolymer 207985-24-8P, 1,1-Bis(4-aminophenyl)-

L11 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
4-tert-butylcyclohexane-3,3',4,4'-tetracarboxyphenyl oxide dianhydride copolymer 207985-26-0P, 1,4-Bis(3,4-dicarboxyphenoxy)benzene dianhydride-1,1-bis(4-aminophenyl)-4-tert-butylcyclohexane copolymer 207985-29-3P, 1,1-Bis(4-aminophenyl)-4-tert-butylcyclohexane-pyromellitic dianhydride copolymer 207985-33-9P, 3,3',4,4'-Benzophenonetetracarboxylic dianhydride-1,1-bis(4-aminophenyl)-4-tert-butylcyclohexane copolymer 207985-39-5P, 3,3',4,4'-Biphenyltetracarboxylic dianhydride-1,1-bis(4-aminophenyl)-4-tert-butylcyclohexane copolymer 207985-41-9P, 2,2-Bis(3,4-dicarboxyphenyl)hexafluoropropane dianhydride-1,1-bis(4-aminophenyl)-4-tert-butylcyclohexane copolymer 207985-43-1P, 1,1-Bis(4-aminophenyl)-4-tert-butylcyclohexane-3,3',4,4'-tetracarboxyphenyl oxide dianhydride copolymer 207985-45-3P, 1,4-Bis(3,4-dicarboxyphenoxy)benzene dianhydride-1,1-bis(4-aminophenyl)-4-tert-butylcyclohexane copolymer
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (prepn. and characterization of sol. kinked polyimides contg. alkyl-cyclohexylidene)
RN 207984-98-3 CAPLUS
CN 1H,3H-Benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, polymer with 4,4'-(4-ethylcyclohexylidene)bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1
CRN 207984-94-9
CMF C20 H26 N2



CM 2
CRN 89-32-7
CMF C10 H2 O6

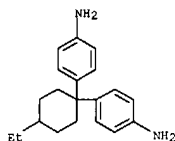


RN 207985-02-2 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-carbonylbis-, polymer with

L11 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
4,4'-(4-ethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

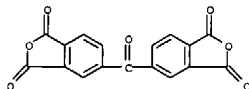
CM 1

CRN 207984-94-9
CMF C20 H26 N2



CM 2

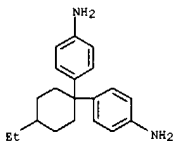
CRN 2421-28-5
CMF C17 H6 O7



RN 207985-06-6 CAPLUS
CN [5,5'-(1,3-bisoxazolidinone-2,2'-diyl)bis(4-ethylcyclohexylidene)bis(benzenamine)] (9CI) (CA INDEX NAME)

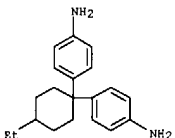
CM 1

CRN 207984-94-9
CMF C20 H26 N2



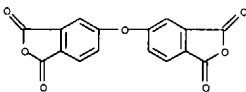
CM 2

L11 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
CMF C20 H26 N2



CM 2

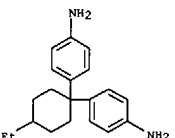
CRN 1823-59-2
CMF C16 H6 O7



RN 207985-14-6 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-(1,3-phenylenebis(oxy))bis-, polymer with 4,4'-(4-ethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

CM 1

CRN 207984-94-9
CMF C20 H26 N2

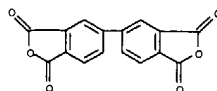


CM 2

CRN 18959-92-7
CMF C22 H10 O8

L11 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

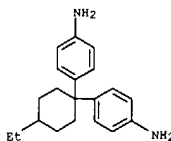
CRN 2420-87-3
CMF C16 H6 O6



RN 207985-08-8 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-(2,2,2-trifluoro-1-(trifluoromethyl)ethylidene)bis-, polymer with 4,4'-(4-ethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

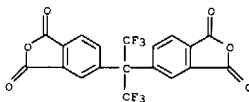
CM 1

CRN 207984-94-9
CMF C20 H26 N2



CM 2

CRN 1107-00-2
CMF C19 H6 F6 O6

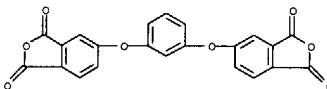


RN 207985-12-4 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-oxybis-, polymer with 4,4'-(4-ethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

CM 1

CRN 207984-94-9

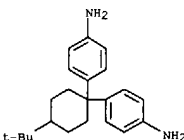
L11 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 207985-16-8 CAPLUS
CN 1H,3H-Benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, polymer with 4,4'-(4-(1,1-dimethylethyl)cyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

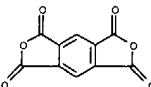
CM 1

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CMF C22 H30 N2



CM 2

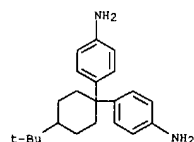
CRN 89-32-7
CMF C10 H2 O6



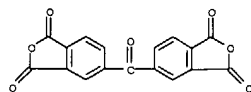
RN 207985-18-0 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-carbonylbis-, polymer with 4,4'-(4-(1,1-dimethylethyl)cyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

CM 1

CRN 138966-60-6
CMF C22 H30 N2

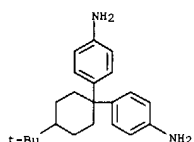


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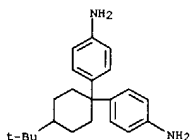
CRN 2421-28-5
CMF C17 H6 O7

RN 207985-20-4 CAPLUS
CN [5,5'-Bis(benzofuran)-1,1',3,3'-tetrone, polymer with 4,4'-[4-(1,1-dimethylethyl)cyclohexylidene]bis(benzenamine)] (9CI) (CA INDEX NAME)

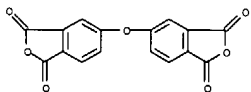
CM 1

CRN 138966-60-6
CMF C22 H30 N2

CM 2

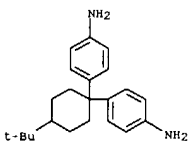
CRN 2420-87-3
CMF C16 H6 O6

CM 2

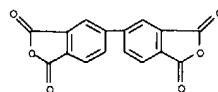
CRN 1823-59-2
CMF C16 H6 O7

RN 207985-26-0 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-[1,3-phenylenebis(oxy)]bis-, polymer with 4,4'-[4-(1,1-dimethylethyl)cyclohexylidene]bis(benzenamine)] (9CI) (CA INDEX NAME)

CM 1

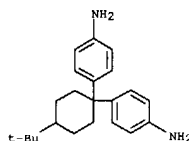
CRN 138966-60-6
CMF C22 H30 N2

CM 2

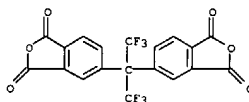
CRN 18959-92-7
CMF C22 H10 O8

RN 207985-22-6 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis-, polymer with 4,4'-[4-(1,1-dimethylethyl)cyclohexylidene]bis(benzenamine)] (9CI) (CA INDEX NAME)

CM 1

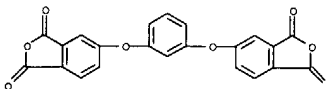
CRN 138966-60-6
CMF C22 H30 N2

CM 2

CRN 1107-00-2
CMF C19 H6 F6 O6

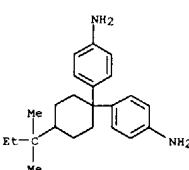
RN 207985-24-8 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-oxybis-, polymer with 4,4'-[4-(1,1-dimethylethyl)cyclohexylidene]bis(benzenamine)] (9CI) (CA INDEX NAME)

CM 1

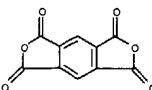
CRN 138966-60-6
CMF C22 H30 N2

RN 207985-29-3 CAPLUS
CN 1H,3H-Benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, polymer with 4,4'-[4-(1,1-dimethylpropyl)cyclohexylidene]bis(benzenamine)] (9CI) (CA INDEX NAME)

CM 1

CRN 207984-96-1
CMF C23 H32 N2

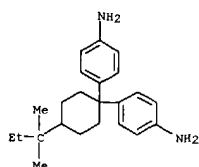
CM 2

CRN 89-32-7
CMF C10 H2 O6

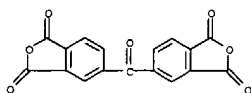
RN 207985-33-9 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-carbonylbis-, polymer with 4,4'-[4-(1,1-dimethylpropyl)cyclohexylidene]bis(benzenamine)] (9CI) (CA INDEX NAME)

CM 1

CRN 207984-96-1
CMF C23 H32 N2

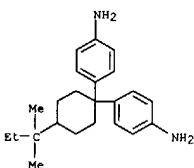


CM 2

CRN 2421-28-5
CMF C17 H6 O7

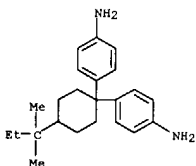
RN 207985-39-5 CAPLUS
CN [5,5'-Bis(isobenzofuran)-1,1',3,3'-tetrone, polymer with 4,4'-[4-(1,1-dimethylpropyl)cyclohexylidene]bis(benzenamine) (9CI) (CA INDEX NAME)]

CM 1

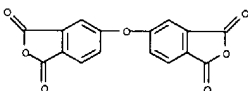
CRN 207984-96-1
CMF C23 H32 N2

CM 2

CRN 2420-87-3

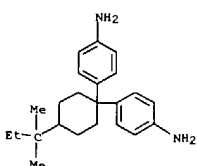


CM 2

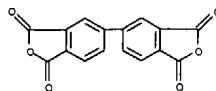
CRN 1823-59-2
CMF C16 H6 O7

RN 207985-45-3 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-[1,3-phenylenebis(oxy)]bis-, polymer with 4,4'-[4-(1,1-dimethylpropyl)cyclohexylidene]bis(benzenamine) (9CI) (CA INDEX NAME)]

CM 1

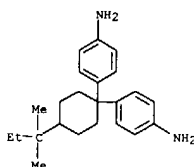
CRN 207984-96-1
CMF C23 H32 N2

CM 2

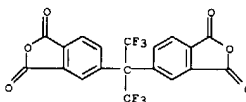


RN 207985-41-9 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis-, polymer with 4,4'-[4-(1,1-dimethylpropyl)cyclohexylidene]bis(benzenamine) (9CI) (CA INDEX NAME)]

CM 1

CRN 207984-96-1
CMF C23 H32 N2

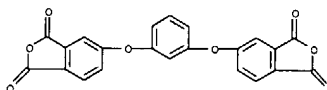
CM 2

CRN 1107-00-2
CMF C19 H6 F6 O6

RN 207985-43-1 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-oxybis-, polymer with 4,4'-[4-(1,1-dimethylpropyl)cyclohexylidene]bis(benzenamine) (9CI) (CA INDEX NAME)]

CM 1

CRN 207984-96-1

CRN 18959-92-7
CMF C22 H10 O8

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

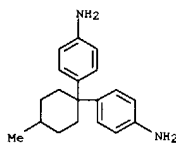
L11 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN
 AB A series of 3 aromatic diamines containing kinked cyclohexylidene moieties was synthesized by condensation of excess PhNH₂ with cyclohexanones containing 0, 1, or 3 Me groups. The structures of the cyclohexylidenedianilines were identified by ¹H NMR, ¹³C NMR, and FT-IR spectroscopies. Polyimides were synthesized from the obtained diamines and various aromatic dianhydrides by

the conventional polycondensation reaction followed by chemical imidization as well as high-temperature one-step polymerization. The inherent viscosities and weight-average mol. wts. of the polyimides were in the ranges of 0.55-1.58 dL/g and (7.4-15.2) × 10⁴ g/mol, resp. The prepared polyimides showed excellent thermal stabilities and good solubility. All polymers were readily

soluble in common organic solvents such as THF, chloroform, tetrachloroethane, etc., and the glass transition temps. were observed at 290-372°.

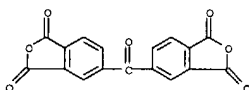
ACCESSION NUMBER: 1997:565041 CAPLUS
 DOCUMENT NUMBER: 127:205985
 TITLE: Synthesis and characterization of soluble polyimides from 1,1-bis(4-aminophenyl)cyclohexane derivatives
 AUTHOR(S): Yi, Mi Hie; Huang, Wenxi; Jin, Moon Young; Choi, Kil-Yeong
 CORPORATE SOURCE: Advanced Materials Division, Korea Research Institute of Chemical Technology, Taejeon, 305-606, S. Korea
 SOURCE: Macromolecules (1997), 30 (19), 5606-5611
 CODEN: MAMOBX; ISSN: 0024-9297
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English

IT 194737-18-3P, 1,1-Bis(4-aminophenyl)-4-methylcyclohexane
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (monomer; preparation of soluble polyimides from)
 RN 194737-18-3 CAPLUS
 CN Benzenamine, 4,4'-(4-methylcyclohexylidene)bis- (9CI) (CA INDEX NAME)

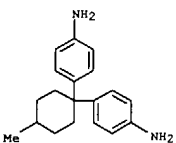


IT 194737-25-2P 194737-27-4P 194737-29-6P
 194737-31-0P 194737-33-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of soluble polyimides from)
 1,1-bis(4-aminophenyl)cyclohexanes)
 RN 194737-25-2 CAPLUS

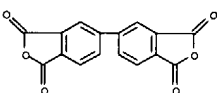
L11 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
 CM 2
 CRN 2421-28-5
 CMF C17 H6 O7



RN 194737-29-6 CAPLUS
 CN [5,5'-Bis(benzofuran)-1,1',3,3'-tetrone, polymer with 4,4'-(4-methylcyclohexylidene)bis(benzenamine)] (9CI) (CA INDEX NAME)
 CM 1
 CRN 194737-18-3
 CMF C19 H24 N2

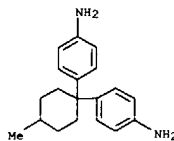


CM 2
 CRN 2420-87-3
 CMF C16 H6 O6

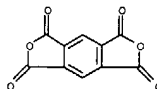


RN 194737-31-0 CAPLUS
 CN 1,3-Isobenzofurandione, 5,5'-oxybis-, polymer with 4,4'-(4-methylcyclohexylidene)bis(benzenamine)] (9CI) (CA INDEX NAME)
 CM 1
 CRN 194737-18-3
 CMF C19 H24 N2

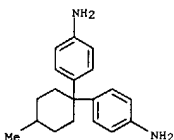
L11 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
 CN 1H,3H-Benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, polymer with 4,4'-(4-methylcyclohexylidene)bis(benzenamine)] (9CI) (CA INDEX NAME)
 CM 1
 CRN 194737-18-3
 CMF C19 H24 N2



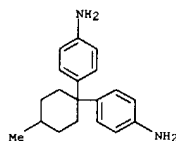
CM 2
 CRN 89-32-7
 CMF C10 H2 O6



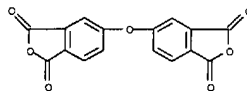
RN 194737-27-4 CAPLUS
 CN 1,3-Isobenzofurandione, 5,5'-carbonylbis-, polymer with 4,4'-(4-methylcyclohexylidene)bis(benzenamine)] (9CI) (CA INDEX NAME)
 CM 1
 CRN 194737-18-3
 CMF C19 H24 N2



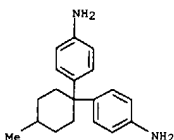
L11 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



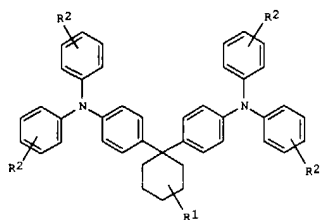
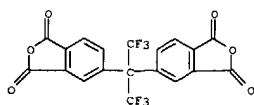
CM 2
 CRN 1823-59-2
 CMF C16 H6 O7



RN 194737-33-2 CAPLUS
 CN 1,3-Isobenzofurandione, 5,5'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis-, polymer with 4,4'-(4-methylcyclohexylidene)bis(benzenamine)] (9CI) (CA INDEX NAME)
 CM 1
 CRN 194737-18-3
 CMF C19 H24 N2



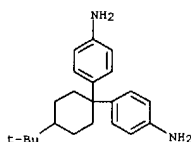
CM 2
 CRN 1107-00-2
 CMF C19 H6 F6 O6



AB The aromatic diamine compound comprises a cyclohexane-containing compound I (R1 = ≥ 1 lower alkyl or Ph; R2 = ≥ 1 lower alkyl, lower alkoxy, halo, or H). The material contains I. The compound showed good thermal stability.

ACCESSION NUMBER: 1996:721327 CAPLUS
DOCUMENT NUMBER: 125:342483
TITLE: Aromatic diamine compound and hole-transporting material containing it for organic electroluminescent device
INVENTOR(S): Suzuki, Osamu; Yokomizo, Hirohiko; Arai, Takeshi; Nakajima, Namiko; Ariga, Teru; Azuma, Yoji
PATENT ASSIGNEE(S): Nissin Spinning, Japan; Japan Radio Co Ltd
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

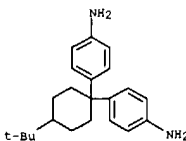
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08231475	A2	19960910	JP 1995-40833	19950228
PRIORITY APPLN. INFO.: JP 1995-40833 19950228				
OTHER SOURCE(S): MARPAT 125:342483				
IT 138966-60-6P				
RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)				
(aromatic diamine compound with good thermal stability for hole-transporting material of organic electroluminescent device)				
RN 138966-60-6 CAPLUS				
CN Benzenamine, 4,4'-[4-(1,1-dimethylethyl)cyclohexylidene]bis- (9CI) (CA INDEX NAME)				



L11 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN
GI For diagram(s), see printed CA issue.
AB The diamines I (R1, R2 = H, Cl, Br, alkyl, cycloalkyl, aryl, aralkyl; R3, R4 = H, alkyl (but ≥ 1 C atom must bear 2 alkyl groups); m = 4-7), useful in polymerization, are prepared. Thus, HCl-catalyzed condensation of 11 mol dihydroisophorone with 66 mol PhNH2 at 140° gave 1045 g 4,4'-(3,3,5-trimethylcyclohexylidene)dianiline (II). Mixing 7.7 g II in DMF with a DMF solution of prepolymer from 600 g polypropylene glycol (OH number 112) and 268 g IPDI, casting the solution on glass, and drying at 100-150° gave a film with softening point (DSC) 206°.

ACCESSION NUMBER: 1992:84366 CAPLUS
DOCUMENT NUMBER: 116:84366
TITLE: Preparation and use of (cycloalkylidene)dianilines
INVENTOR(S): Waldmann, Helmut; Leyzer, Ulrich; Mueller, Hans Peter;
Idel, Karsten Josef; Casser, Carl; Fengler, Gerd; Westeppe, Uwe
PATENT ASSIGNEE(S): Bayer A.-G., Germany
SOURCE: Ger. Offen., 10 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4014847	A1	19911114	DE 1990-4014847	19900509
PRIORITY APPLN. INFO.: DE 1990-4014847 19900509				
OTHER SOURCE(S): MARPAT 116:84366				
IT 138966-60-6P				
RL: PREP (Preparation)				
(preparation of, for polymerization)				
RN 138966-60-6 CAPLUS				
CN Benzenamine, 4,4'-[4-(1,1-dimethylethyl)cyclohexylidene]bis- (9CI) (CA INDEX NAME)				



GI For diagram(s), see printed CA Issue.

AB Azo dyes for use as purple components in the Ag dye-bleach process have the general structure I, where A is H, an alkyl or alkoxy group, or halogen, Z is 5(or 6)-SO₃H, Y is CO or SO₂, X is an alkyl or aryl group (the aryl group possibly is substituted by an alkyl and/or halogenated alkyl group or by halogens), R' is H, alkyl, cycloalkyl, or the group C(Q)Z, where Q is H or an alkyl group, and R is 1,1,4-cyclohexanetriyl. For example, 22 g.

4-tert-butyl-1,1-bis(4-amino-3-methylphenyl)cyclohexane (II) (from o-toluidine and 4-tert-butylcyclohexanone) in a mixture of 150 ml. MeOCH₂CH₂OH, 50 ml. concentrated HCl, and 50 g. ice is tetrazotized

and coupled with 100.8 g. 8-(2,5-dimethyl-4-chlorobenzenesulfonamido)-1-naphthol-3,6-disulfonic acid (III) in 600 ml. H₂O and 180 ml. pyridine, and the dye (IV) [I, R' is Me₃C, A is Me, Z is 6-SO₃H, Y is SO₂, and X is 2,5,4-Me₂(Cl)C₆H₂] is salted out. Similarly, the 4-amino-3-ethylphenyl analog of II is tetrazotized and coupled with the 2,5-dichlorobenzenesulfonamido analog of III; and 4-isopropylidene-1,1-bis(4-amino-3-ethylphenyl)cyclohexane is tetrazotized and coupled with the 4-methylbenzenesulfonamido analog of III to give dyes. IV (3.5 g.) is dissolved in 600 ml. H₂O with 1 g. saponin and then mixed with a green-sensitized AgBr-gelatin emulsion containing about 35 g. Ag/kg.; the mixture is poured onto a paper or film carrier and dried. The exposed

film is processed by developing for 5 min. in a standard Metol-hydroquinone developer solution; rinsed for 1 min.; fixed for 5 min. in a solution of

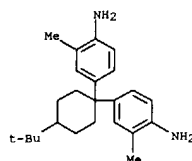
20% Na₂S₂O₃ and 2% Na₂S₂O₅; rinsed for 5 min.; hardened for 5 min. in 4% HCHO; rinsed for 5 min.; color-bleached for 10 min. in a solution of 200 ml.

10% KI, 10 g. NaH₂PO₂, 90 ml. quinoline, 300 ml. 5N HCl, and 400 ml. H₂O; rinsed for 5 min.; Ag-bleached for 5 min. with a solution containing 80

g. K₃Fe(CN)₆, 10 g. NaHCO₃, and 1000 ml. H₂O; rinsed for 5 min.; fixed for 5 min.; rinsed for 20 min., and dried to give a purple positive image. Cf. CA 55, 8136d.

ACCESSION NUMBER: 1961:74859 CAPLUS
DOCUMENT NUMBER: 55:74859
ORIGINAL REFERENCE NO.: 55:141381,14139a-e
TITLE: Colored positives by the silver dye bleach process
INVENTOR(S): Brauningner, Georg; Loffler, Karl
PATENT ASSIGNEE(S): Agfa Akt.-Ges.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IT	1039840		19580925	DE	
102812-38-4	(preparation of)				
RN	102812-38-4	CAPLUS			
CN	o-Toluidine, 4,4'-(4-tert-butylcyclohexylidene)di- (6CI) (CA INDEX NAME)				



=> fil reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

70.53

572.72

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

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-14.55

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STRUCTURE FILE UPDATES: 27 APR 2004 HIGHEST RN 677274-15-6

DICTIONARY FILE UPDATES: 27 APR 2004 HIGHEST RN 677274-15-6

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

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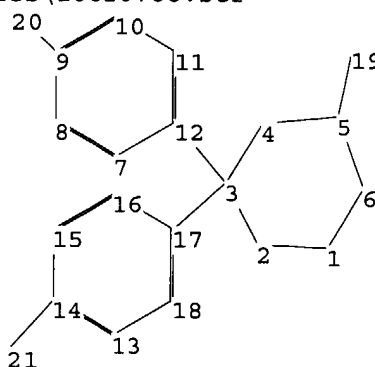
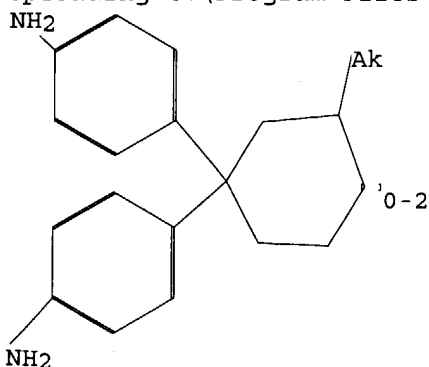
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:

<http://www.cas.org/ONLINE/DBSS/registryss.html>

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chain nodes :

19 20 21

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

chain bonds :

3-12 3-17 5-19 9-20 14-21

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18
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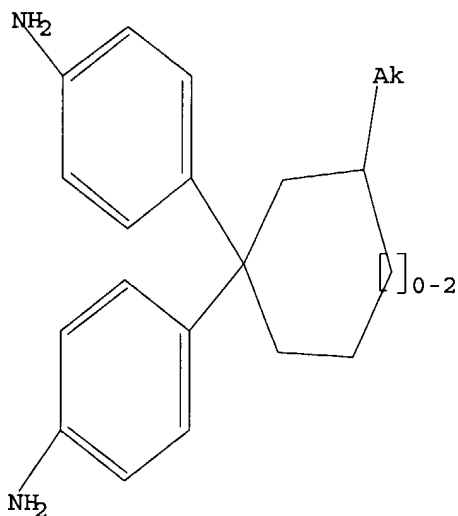
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 exact bonds :
 3-12 3-17
 normalized bonds :
 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18 14-15 15-16 16-17 17-18

Match level :
 1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS
 20:CLASS 21:CLASS

L12 STRUCTURE UPLOADED

=> d query
 L12 STR



Structure attributes must be viewed using STN Express query preparation.

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 SAMPLE SCREEN SEARCH COMPLETED - 216 TO ITERATE

100.0% PROCESSED 216 ITERATIONS 2 ANSWERS
 SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
 BATCH **COMPLETE**
 PROJECTED ITERATIONS: 3439 TO 5201
 PROJECTED ANSWERS: 2 TO 124

L13 2 SEA SSS SAM L12

=> s l12 full

FULL SEARCH INITIATED 18:00:42 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 3802 TO ITERATE

100.0% PROCESSED 3802 ITERATIONS
SEARCH TIME: 00.00.01

20 ANSWERS

L14 20 SEA SSS FUL L12

=> fil caplus

COST IN U.S. DOLLARS

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ENTRY	SESSION
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FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
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FILE COVERS 1907 - 29 Apr 2004 VOL 140 ISS 18
FILE LAST UPDATED: 28 Apr 2004 (20040428/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L15 7 L14

=> d l15 1-7 abs ibib hitstr

L15 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN
 AB The polyamic acids and polyimides are manufactured by polymerization of
 21 tetracarboxylic dianhydride, 21 aromatic diamine, 21 diamine
 having siloxane units RSiMe₂(OSiMe₂)_nR (R = C₁-20 alkylene; n = 1-20),
 and 4-R-substituted cyclohexylidene dianiline and/or 3,3,5-trimethylcyclohexylidene dianiline (R = Me, Et, CMe₃, CMe₂CH₂CH₃, phenyl).
 Thus, a solution of a polyamic acid prepared from oxydianiline, trimethylcyclohexylidene dianiline, bis(3-aminopropyl)tetramethyldisiloxane, and 3,3',4,4'-benzophenonetetracarboxylic acid dianhydride was applied on a glass plate, dried, and heated at 300° for 1 h to give a polyimide film with T_g 305°, modulus of elasticity 4900 N/mm², and tensile strength 105.8 N/mm². An adhesive tape, useful for electronic parts, etc., containing a polyimide prepared from the polyamic acid showed improved adhesion at high temp and good solubility in organic solvents.
 ACCESSION NUMBER: 2002:147688 CAPLUS
 DOCUMENT NUMBER: 136:201334
 TITLE: Manufacture of polyamic acids and polyimides with three dimensional structure and their adhesive tapes
 INVENTOR(S): Kwon, Jeong Min; Kim, Soon Sik; Chang, Kyeong Ho; Lee,
 Kyung Rok
 PATENT ASSIGNEE(S): Saehan Industries Inc., S. Korea
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002060489	A2	20020226	JP 2000-239006	20000807
PRIORITY APPL. INFO.: JP 2000-239006 20000807				
IT 345976-53-6P 345976-54-7P 345976-55-8P 345976-56-9P 401616-87-3P				
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (manufacture of polyamic acids and polyimides with three dimensional structure for adhesive tapes)				
RN 345976-53-6	CAPLUS			
CN 1H, 3H-Benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, polymer with 4,4'-oxybis[benzenamine], 3,3'-(1,1,3,3-tetramethyl-1,3-disiloxanedyl)bis[1-propanamine] and 4,4'-(3,3,5-trimethylcyclohexylidene)bis[benzenamine] (9CI) (CA INDEX NAME)				

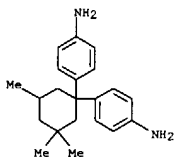
CM 1

CRN 138749-44-7
 CMF C21 H28 N2

L15 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
 oxybis[benzenamine], 3,3'-(1,1,3,3-tetramethyl-1,3-disiloxanedyl)bis[1-propanamine] and 4,4'-(3,3,5-trimethylcyclohexylidene)bis[benzenamine] (9CI) (CA INDEX NAME)

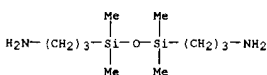
CM 1

CRN 138749-44-7
 CMF C21 H28 N2



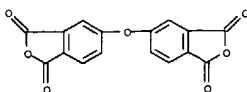
CM 2

CRN 2469-55-8
 CMF C10 H28 N2 O Si2



CM 3

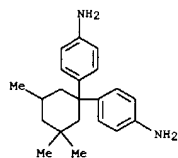
CRN 1823-59-2
 CMF C16 H6 O7



CM 4

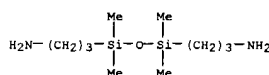
CRN 101-80-4
 CMF C12 H12 N2 O

L15 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



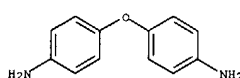
CM 2

CRN 2469-55-8
 CMF C10 H28 N2 O Si2



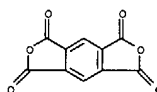
CM 3

CRN 101-80-4
 CMF C12 H12 N2 O



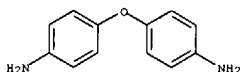
CM 4

CRN 89-32-7
 CMF C10 H2 O6



RN 345976-54-7 CAPLUS
 CN 1,3-Isobenzofurandione, 5,5'-oxybis-, polymer with 4,4'-

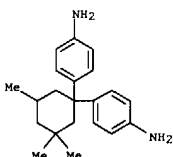
L15 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 345976-55-8 CAPLUS
 CN [5,5'-Bisobenzofuran]-1,1',3,3'-tetrone, polymer with 4,4'-oxybis[benzenamine], 3,3'-(1,1,3,3-tetramethyl-1,3-disiloxanedyl)bis[1-propanamine] and 4,4'-(3,3,5-trimethylcyclohexylidene)bis[benzenamine] (9CI) (CA INDEX NAME)

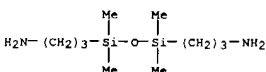
CM 1

CRN 138749-44-7
 CMF C21 H28 N2



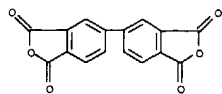
CM 2

CRN 2469-55-8
 CMF C10 H28 N2 O Si2



CM 3

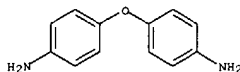
CRN 2420-87-3
 CMF C16 H6 O6



CM 4

CRN 101-80-4

CMF C12 H12 N2 O



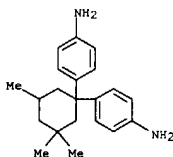
RN 345976-56-9 CAPLUS

CN 1,3-Isobenzofurandione, 5,5'-(2,2,2-trifluoro-1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis-, polymer with 4,4'-oxybis(benzenamine), 3,3'-(1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis[1-propanamine] and 4,4'-(3,3,5-trimethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

CM 1

CRN 138749-44-7

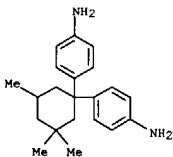
CMF C21 H28 N2



CM 2

CRN 2469-55-8

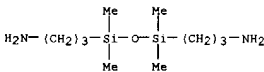
CMF C10 H28 N2 O Si2



CM 2

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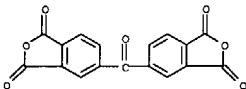
CMF C10 H28 N2 O Si2



CM 3

CRN 2421-28-5

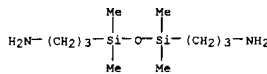
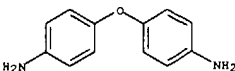
CMF C17 H6 O7



CM 4

CRN 101-80-4

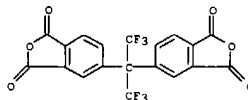
CMF C12 H12 N2 O



CM 3

CRN 1107-00-2

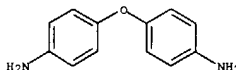
CMF C19 H6 F6 O6



CM 4

CRN 101-80-4

CMF C12 H12 N2 O



RN 401616-87-3 CAPLUS

CN 1,3-Isobenzofurandione, 5,5'-carbonylbis-, polymer with 4,4'-oxybis(benzenamine), 3,3'-(1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis[1-propanamine] and 4,4'-(3,3,5-trimethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

CM 1

CRN 138749-44-7

CMF C21 H28 N2

AB Polyamic acid are prepared by reacting a mixture containing: at least one tetracarboxylic dianhydride; at least one aromatic diamine; at least one diamine with a siloxane structure, and at least one alkyl or aryl cyclohexylidene dianiline. The polymers have such three-dimensional mol. structures that a significant improvement can be brought about in solvent solubility, thermal resistance, mech. properties, and adhesive properties onto various substrates. The polyamic acid is converted into polyimide through thermal or chemical imidization. The polyimide is suitable for use in adhesives or adhesive tapes for electronic parts.

ACCESSION NUMBER: 2001:464382 CAPLUS

DOCUMENT NUMBER: 135:61779

TITLE: Preparation of siloxane-containing polyamic acids and polyimides useful for adhesives

INVENTOR(S): Kwon, Jeong Min; Kim, Soon Sik; Chang, Kyeong Ho;

PATENT ASSIGNEE(S): Lee, Kyung Rok

SOURCE: Saehan Industries Incorporation, S. Korea

U.S., 8 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6252033	B1	20010626	US 2000-531314	20000320
DE 10008120	A1	20010906	DE 2000-10008120	20000222
DE 10008121	A1	20010906	DE 2000-10008121	20000222
CN 1313350	A	20010919	CN 2000-104040	20000314
CN 1117113	B	20030806		
TW 508360	B	20021101	TW 2000-89108363	20000503
PRIORITY APPLN. INFO.:			DE 2000-10008120 A	20000222
			US 2000-531314 A	20000320

IT 345976-52-5P 345976-53-6P 345976-54-7P

345976-55-8P 345976-56-9P

RL: IMF (Industrial manufacture); PREP (Preparation)

(preparation of siloxane-containing polyamic acids and polyimides)

useful for adhesives)

RN 345976-52-5 CAPLUS

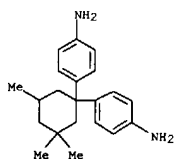
CN 1,3-Isobenzofurandione, 5,5'-sulfonylbis-, polymer with 4,4'-oxybis(benzenamine), 3,3'-(1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis[1-propanamine] and 4,4'-(3,3,5-trimethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

CM 1

CRN 138749-44-7

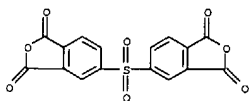
CMF C21 H28 N2

L15 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



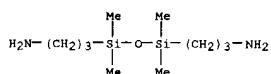
CM 2

CRN 2540-99-0
CMF C16 H6 O8 S



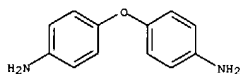
CM 3

CRN 2469-55-8
CMF C10 H28 N2 O S12



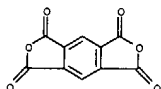
CM 4

CRN 101-80-4
CMF C12 H12 N2 O



RN 345976-53-6 CAPLUS

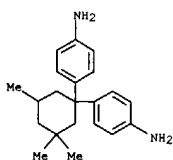
L15 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 345976-54-7 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-oxybis-, polymer with 4,4'-oxybis[benzenamine], 3,3'-(1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis[1-propanamine] and 4,4'-(3,3,5-trimethylcyclohexylidene)bis[benzenamine] (9CI) (CA INDEX NAME)

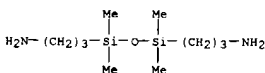
CM 1

CRN 138749-44-7
CMF C21 H28 N2



CM 2

CRN 2469-55-8
CMF C10 H28 N2 O S12



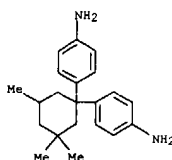
CM 3

CRN 1823-59-2
CMF C16 H6 O7

L15 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
CN 1H,3H-Benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, polymer with 4,4'-oxybis[benzenamine], 3,3'-(1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis[1-propanamine] and 4,4'-(3,3,5-trimethylcyclohexylidene)bis[benzenamine] (9CI) (CA INDEX NAME)

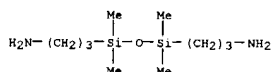
CM 1

CRN 138749-44-7
CMF C21 H28 N2



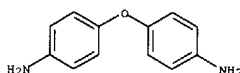
CM 2

CRN 2469-55-8
CMF C10 H28 N2 O S12



CM 3

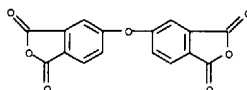
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CMF C12 H12 N2 O



CM 4

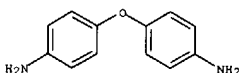
CRN 89-32-7
CMF C10 H2 O6

L15 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



CM 4

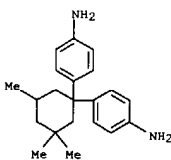
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CMF C12 H12 N2 O



RN 345976-55-8 CAPLUS
CN [5,5'-Bis(benzofuran)-1,1',3,3'-tetrone, polymer with 4,4'-oxybis[benzenamine], 3,3'-(1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis[1-propanamine] and 4,4'-(3,3,5-trimethylcyclohexylidene)bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

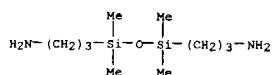
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CMF C21 H28 N2



CM 2

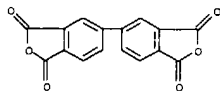
CRN 2469-55-8
CMF C10 H28 N2 O S12

L15 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



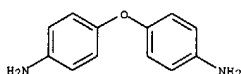
CM 3

CRN 2420-87-3
CMF C16 H6 O6



CM 4

CRN 101-80-4
CMF C12 H12 N2 O

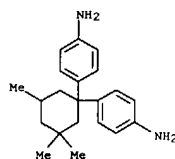


RN 345976-56-9 CAPLUS
CN 1,3-Isobenzofuranone, 5,5'-(2,2,2-trifluoro-1,3-bis(trifluoromethyl)ethylidene)bis-, polymer with 4,4'-oxybis(benzenamine), 3,3'-(1,1,3,3-tetramethyl-1,3-disiloxanediyl)bis[1-propanamine] and 4,4'-(3,3,5-trimethylcyclohexylidene)bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

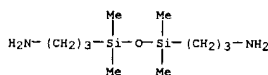
CRN 138749-44-7
CMF C21 H28 N2

L15 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



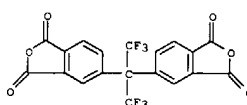
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CRN 2469-55-8
CMF C10 H28 N2 O S12



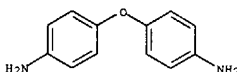
CM 3

CRN 1107-00-2
CMF C19 H6 F6 O6



CM 4

CRN 101-80-4
CMF C12 H12 N2 O



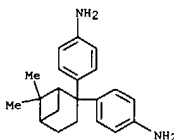
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS

L15 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L15 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN
AB The devices comprise a hole transport, an electron transport and/or a phosphor layer comprising a compound having an asym. carbon.
ACCESSION NUMBER: 2001:451350 CAPLUS
DOCUMENT NUMBER: 135:68315
TITLE: Organic electroluminescent devices
INVENTOR(S): Tanaka, Hiromitsu; Mouril, Makoto; Takeuchi, Hisato; Tokito, Seiji
PATENT ASSIGNEE(S): Toyota Central Research and Development Laboratories, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKKXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001167882	A2	20010622	JP 1999-353183	19991213
PRIORITY APPLN. INFO.: JP 1999-353183 19991213				

IT 345654-19-5
RL: DEV (Device component use); USES (Uses)
(Organic electroluminescent devices)
RN 345654-19-5 CAPLUS
CN Benzenamine, 4,4'-(6,6-dimethylbicyclo[3.1.1]hept-2-ylidene)bis- (9CI)
(CA INDEX NAME)

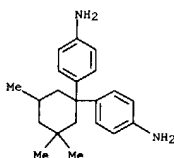


AB A review with 15 refs. is given on the authors preparation of diamine monomers and polymers followed by data on solubility and phys. properties of the polyimides. A series of novel aromatic diamines containing kinked cycloalkane structures between 2 Ph rings were synthesized by HCl-catalyzed condensation reaction of excess aniline and corresponding cycloalkanone deriva. The structures of the diamines were identified by ¹H NMR, ¹³C NMR, FT-IR spectroscopy, and elemental anal. The polyimides were synthesized from the obtained diamines with various aromatic dianhydrides by one-step polymerization in m-cresol. The polymerization was conducted for 6.apprx.8 h with refluxing, which was enough to obtain the polymers with high mol. weight. The inherent viscosities of the resulting polyimides were in the range of 0.37.apprx.1.66 dL/g. All polymers were readily soluble in common organic solvents such as chloroform, tetrachloroethane, dimethylacetamide, etc. and the glass transition temps. were observed at 290-372°. UV-visible spectra were obtained to measure the transparency of polymer films. Most of the polymers showed high transmission above 90% in the wavelength of 450.apprx.600 nm.

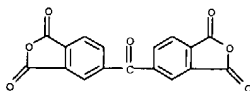
ACCESSION NUMBER: 1999:717919 CAPLUS
DOCUMENT NUMBER: 132:50507
TITLE: Soluble polyimides containing alicyclic structures
AUTHOR(S): Choi, Kil-Yeong; Yi, Mi Hie
CORPORATE SOURCE: Advanced Materials Division, Korea Research Institute Chemical Technology, Taejeon, 305, S. Korea
SOURCE: Macromolecular Symposia (1999), 142(Advanced Materials), 193-204
CODEN: MSYMEC; ISSN: 1022-1360
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English

IT 138749-44-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(solubility and thermal properties of soluble polyimides containing alicyclic structures)

RN 138749-44-7 CAPLUS
CN Benzenamine, 4,4'-(3,3,5-trimethylcyclohexylidene)bis- (9CI) (CA INDEX NAME)

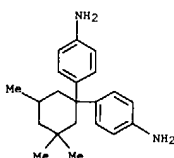


CM 2
CRN 2421-28-5
CMF C17 H6 O7



RN 194737-39-8 CAPLUS
CN [5,5'-Bis(isobenzofuran)-1,1',3,3'-tetrone, polymer with 4,4'-(3,3,5-trimethylcyclohexylidene)bis(benzenamine)] (9CI) (CA INDEX NAME)

CM 1
CRN 138749-44-7
CMF C21 H28 N2

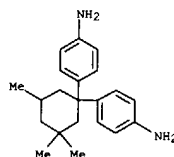


CM 2
CRN 2420-87-3
CMF C16 H6 O6

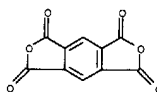
IT 194737-35-4P 194737-37-6P 194737-39-8P
194737-41-2P 194737-43-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(solubility and thermal properties of soluble polyimides containing alicyclic structures)

RN 194737-35-4 CAPLUS
CN 1H,3H-Benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, polymer with 4,4'-(3,3,5-trimethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

CM 1
CRN 138749-44-7
CMF C21 H28 N2

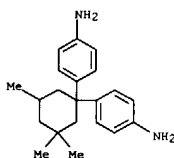


CM 2
CRN 89-32-7
CMF C10 H2 O6

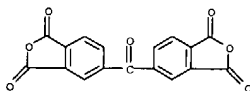


RN 194737-37-6 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-carbonylbis-, polymer with 4,4'-(3,3,5-trimethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

CM 1
CRN 138749-44-7
CMF C21 H28 N2

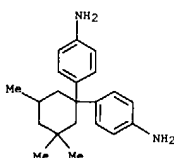


CM 2
CRN 2421-28-5
CMF C17 H6 O7

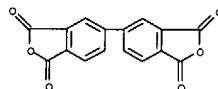


RN 194737-39-8 CAPLUS
CN [5,5'-Bis(isobenzofuran)-1,1',3,3'-tetrone, polymer with 4,4'-(3,3,5-trimethylcyclohexylidene)bis(benzenamine)] (9CI) (CA INDEX NAME)

CM 1
CRN 138749-44-7
CMF C21 H28 N2

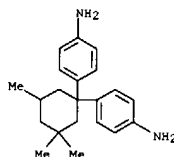


CM 2
CRN 2420-87-3
CMF C16 H6 O6

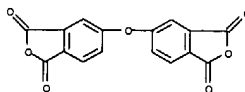


RN 194737-41-2 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-oxybis-, polymer with 4,4'-(3,3,5-trimethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

CM 1
CRN 138749-44-7
CMF C21 H28 N2

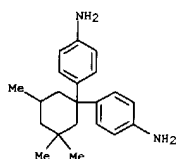


CM 2
CRN 1823-59-2
CMF C16 H6 O7



RN 194737-43-4 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis-, polymer with 4,4'-(3,3,5-trimethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

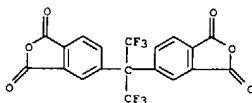
CM 1
CRN 138749-44-7
CMF C21 H28 N2



CM 2

CRN 1107-00-2

CMF C19 H6 F6 O6

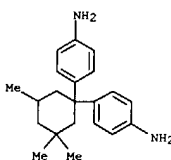


REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE
 FORMAT

L15 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN
 AB Novel poly(amide imide)s (PAI) containing alkyl-substituted cyclohexylidene moieties were synthesized by conventional polycondensation of trimellitic anhydride chloride with novel aromatic diamines followed by chemical imidization using acetic anhydride and pyridine. The inherent viscosities of the resulting PAIs are relatively high and range from 71-112 mL g⁻¹. The prepared PAIs show excellent thermal stability and good solubility. The glass transition temps. (T_g) measured by DSC are observed in the range of 312-342°. Furthermore, all the polymers are readily soluble in less hygroscopic organic solvents like cyclohexanone, γ -butyrolactone as well as aprotic polar solvents.

ACCESSION NUMBER: 1998:577019 CAPLUS
 DOCUMENT NUMBER: 129:231107
 TITLE: Synthesis and characterization of poly(amide imide)s containing cyclohexylidene moieties with bulky substituents
 AUTHOR(S): Yi, Mi Hie; Huang, Wen Xi; Choi, Kil-Yeong
 CORPORATE SOURCE: Advanced Materials Division, Korea Research Inst. Chem. Technol., Taejeon, 305, S. Korea
 SOURCE: Angewandte Makromolekulare Chemie (1998), 259, 5-9
 CODEN: ANMCBO; ISSN: 0003-3146
 PUBLISHER: Huethig & Wepf Verlag
 DOCUMENT TYPE: Journal
 LANGUAGE: English

IT 138749-44-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (monomer; preparation and characterization and polymerization of bis(aminophenyl)alkylcyclohexane monomers)
 RN 138749-44-7 CAPLUS
 CN Benzenamine, 4,4'-(3,3,5-trimethylcyclohexylidene)bis- (9CI) (CA INDEX NAME)

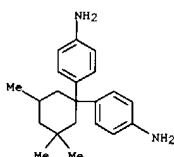


IT 212898-99-2P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (preparation and characterization of cardo poly(amide imide)s containing cyclohexylidene moieties with bulky substituents)
 RN 212898-99-2 CAPLUS
 CN 5-Isobenzofuranecarbonyl chloride, 1,3-dihydro-1,3-dioxo-, polymer with 4,4'-(3,3,5-trimethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

CM 1

CRN 138749-44-7

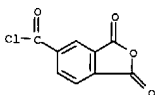
CMF C21 H28 N2



CM 2

CRN 1204-28-0

CMF C9 H3 Cl O4

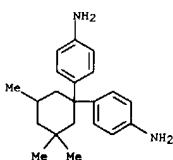


L15 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN
 AB A series of 3 aromatic diamines containing kinked cyclohexylidene moieties was synthesized by condensation of excess PhNH₂ with cyclohexanones containing 0, 1, or 3 Me groups. The structures of the cyclohexylidenedianilines were identified by ¹H NMR, ¹³C NMR, and FT-IR spectroscopies. Polyimides were synthesized from the obtained diamines and various aromatic dianhydrides

by the conventional polycondensation reaction followed by chemical imidization as well as high-temperature one-step polymerization. The inherent viscosities and weight-average mol. wts. of the polyimides were in the ranges of 0.55-1.58 dL/g and (7.4-15.2) × 10⁴ g/mol, resp. The prepared polyimides showed excellent thermal stabilities and good solubility. All polymers were readily soluble in common organic solvents such as THF, chloroform, tetrachloroethane, etc., and the glass transition temps. were observed at 290-372°.

ACCESSION NUMBER: 1997:565041 CAPLUS
 DOCUMENT NUMBER: 127:205985
 TITLE: Synthesis and characterization of soluble polyimides from 1,1-bis(4-aminophenyl)cyclohexane derivatives
 AUTHOR(S): Yi, Mi Hie; Huang, Wenxi; Jin, Moon Young; Choi, Kil-Yeong
 CORPORATE SOURCE: Advanced Materials Division, Korea Research Institute of Chemical Technology, Taejeon, 305-606, S. Korea
 SOURCE: Macromolecules (1997), 30(19), 5606-5611
 CODEN: MAMOBX; ISSN: 0024-9297
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English

IT 138749-44-7P, 1,1-Bis(4-aminophenyl)-3,3,5-trimethylcyclohexane
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (monomer; preparation of soluble polyimides from)
 RN 138749-44-7 CAPLUS
 CN Benzenamine, 4,4'-(3,3,5-trimethylcyclohexylidene)bis- (9CI) (CA INDEX NAME)

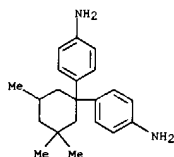


IT 194737-35-4P 194737-37-6P 194737-39-8P
 194737-41-2P 194737-43-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of soluble polyimides from 1,1-bis(4-aminophenyl)cyclohexanes)

L15 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
 RN 194737-35-4 CAPLUS
 CN 1H,3H-Benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, polymer with
 4,4'-(3,3,5-trimethylcyclohexylidene)bis[benzenamine] (9CI) (CA INDEX
 NAME)

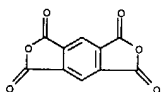
CM 1

CRN 138749-44-7
 CMF C21 H28 N2



CM 2

CRN 89-32-7
 CMF C10 H2 O6

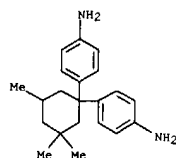


RN 194737-37-6 CAPLUS
 CN 1,3-Isobenzofurandione, 5,5'-carbonylbis-, polymer with
 4,4'-(3,3,5-trimethylcyclohexylidene)bis[benzenamine] (9CI) (CA INDEX
 NAME)

CM 1

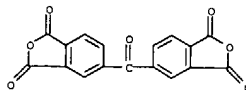
CRN 138749-44-7
 CMF C21 H28 N2

L15 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



CM 2

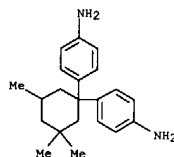
CRN 2421-28-5
 CMF C17 H6 O7



RN 194737-39-8 CAPLUS
 CN [5,5'-Biisobenzofuran]-1,1',3,3'-tetrone, polymer with
 4,4'-(3,3,5-trimethylcyclohexylidene)bis[benzenamine] (9CI) (CA INDEX
 NAME)

CM 1

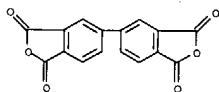
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 CMF C21 H28 N2



CM 2

CRN 2420-87-3
 CMF C16 H6 O6

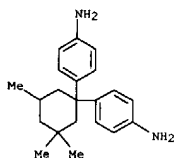
L15 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 194737-41-2 CAPLUS
 CN 1,3-Isobenzofurandione, 5,5'-oxybis-, polymer with 4,4'-(3,3,5-
 trimethylcyclohexylidene)bis[benzenamine] (9CI) (CA INDEX NAME)

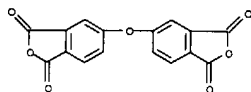
CM 1

CRN 138749-44-7
 CMF C21 H28 N2



CM 2

CRN 1823-59-2
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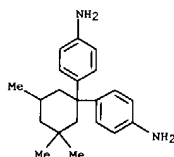


RN 194737-43-4 CAPLUS
 CN 1,3-Isobenzofurandione, 5,5'-[2,2,2-trifluoro-1-
 (trifluoromethyl)ethylidene]bis-, polymer with 4,4'-(3,3,5-
 trimethylcyclohexylidene)bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

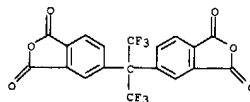
CRN 138749-44-7
 CMF C21 H28 N2

L15 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



CM 2

CRN 1107-00-2
 CMF C19 H6 F6 O6



L15 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

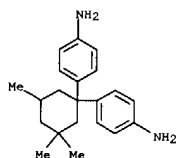
GI For diagram(s), see printed CA Issue.
 AB The diamines I (R1, R2 = H, Cl, Br, alkyl, cycloalkyl, aryl, aralkyl; R3, R4 = H, alkyl (but 21 C atom must bear 2 alkyl groups); m = 4-7), useful in polymerization, are prepared Thus, HCl-catalyzed condensation of 11 mol dihydroisophorone with 66 mol PhNH2 at 140° gave 1045 g 4,4'-(3,3,5-trimethylcyclohexylidene)dianiline (II). Mixing 7.7 g II in DMF with a DMF solution of prepolymer from 600 g polypropylene glycol (OH number 112) and 268 g IPDI, casting the solution on glass, and drying at 100-150° gave a film with softening point (DSC) 206°.

ACCESSION NUMBER: 1992:84366 CAPLUS
 DOCUMENT NUMBER: 116:84366
 TITLE: Preparation and use of (cycloalkylidene)dianilines
 INVENTOR(S): Waldmann, Helmut; Leyrer, Ulrich; Mueller, Hans Peter;
 Idel, Karsten Josef; Casser, Carl; Fengler, Gerd; Westeppe, Uwe
 PATENT ASSIGNEE(S): Bayer A.-G., Germany
 SOURCE: Ger. Offen., 10 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

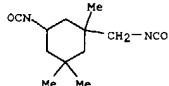
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4014847	A1	19911114	DE 1990-4014847	19900509
PRIORITY APPL. INFO.: DE 1990-4014847 19900509				
OTHER SOURCE(S): MARPAT 116:84366				
IT 130749-45-8P 130749-46-9P 130749-47-0P				
IT 130749-48-1P				
RL: PRP (Properties); PREP (Preparation)				
(Preparation and properties of)				
RN	138749-45-8 CAPLUS			
CN	Benzenamine, 4,4'-(3,3,5-trimethylcyclohexylidene)bis-, polymer with α-hydro-m-hydroxypoly(oxy(methyl-1,2-ethanediyl)) and 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane (9CI) (CA INDEX NAME)			

CM 1

CRN 138749-44-7
 CMF C21 H28 N2



L15 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
 CRN 4098-71-9
 CMF C12 H18 N2 O2



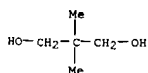
CM 3

CRN 629-11-8
 CMF C6 H14 O2

HO-(CH2)6-OH

CM 4

CRN 126-30-7
 CMF C5 H12 O2



CM 5

CRN 124-04-9
 CMF C6 H10 O4

HO2C-(CH2)4-CO2H

RN 138749-47-0 CAPLUS
 CN Hexanedioic acid, polymer with 1,4-butanediol, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and 4,4'-(3,3,5-trimethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

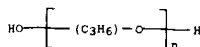
CM 1

CRN 138749-44-7
 CMF C21 H28 N2

L15 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

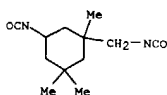
CM 2

CRN 25322-69-4
 CMF (C3 H6 O)n H2 O
 CCI IDS, PMS



CM 3

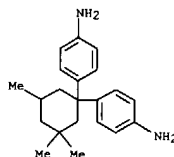
CRN 4098-71-9
 CMF C12 H18 N2 O2



RN 138749-46-9 CAPLUS
 CN Hexanedioic acid, polymer with 2,2-dimethyl-1,3-propanediol, 1,6-hexanediol, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and 4,4'-(3,3,5-trimethylcyclohexylidene)bis(benzenamine) (9CI) (CA INDEX NAME)

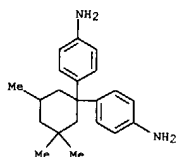
CM 1

CRN 138749-44-7
 CMF C21 H28 N2



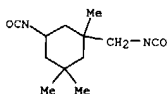
CM 2

L15 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



CM 2

CRN 4098-71-9
 CMF C12 H18 N2 O2



CM 3

CRN 124-04-9
 CMF C6 H10 O4

HO2C-(CH2)4-CO2H

CM 4

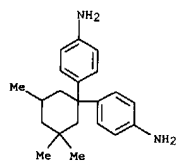
CRN 110-63-4
 CMF C4 H10 O2

HO-(CH2)4-OH

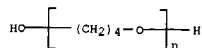
RN 138749-48-1 CAPLUS
 CN Benzenamine, 4,4'-(3,3,5-trimethylcyclohexylidene)bis-, polymer with α-hydro-m-hydroxypoly(oxy-1,4-butanediyl) and 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane (9CI) (CA INDEX NAME)

CM 1

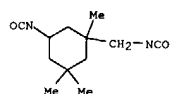
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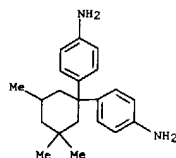
CM 2
CRN 25190-06-1
CMF (C4 H8 O)n H2 O
CCI PMS



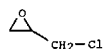
CM 3
CRN 4098-71-9
CMF C12 H18 N2 O2



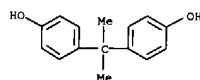
IT 138749-49-2P
RL: PREP (Preparation)
(preparation of crosslinked, and properties of)
RN 138749-49-2 CAPLUS
CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane
and 4,4'-(3,3,5-trimethylcyclohexylidene)bis(benzenamine) (9CI) (CA
INDEX
NAME)
CM 1
CRN 138749-44-7
CMF C21 H28 N2



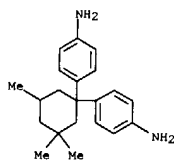
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CRN 106-89-8
CMF C3 H5 Cl O



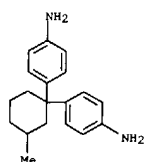
CM 3
CRN 80-05-7
CMF C15 H16 O2



IT 138749-44-7P 138966-59-3P
RL: PREP (Preparation)
(preparation of, for polymerization)
RN 138749-44-7 CAPLUS
CN Benzenamine, 4,4'-(3,3,5-trimethylcyclohexylidene)bis- (9CI) (CA INDEX
NAME)



RN 138966-59-3 CAPLUS
CN Benzenamine, 4,4'-(3-methylcyclohexylidene)bis- (9CI) (CA INDEX NAME)



=> logoff y
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
37.24	765.80

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-4.85	-19.40

CA SUBSCRIBER PRICE

STN INTERNATIONAL LOGOFF AT 18:06:24 ON 29 APR 2004